

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: OP2018-014
Expiration Date: FEB 02 2023
Installation ID: 221-0031
Project Number: 2011-06-054

Installation Name and Address

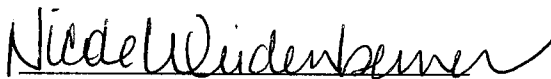
Timber Ridge Landfill
12581 State Highway H
Richwoods, MO 63071
Washington County

Parent Company's Name and Address

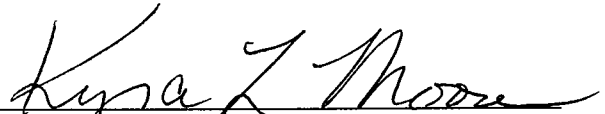
IESI MO Landfill Corporation
196 Northeast Industrial Court
Bridgeton, MO 63044

Installation Description:

Timber Ridge Landfill is a municipal solid waste landfill with a design capacity of 10,866,160 Megagrams. It is a non-codisposal, open landfill that has accepted waste since 2003. The installation does not appear on the list of Named Installations, therefore fugitives are not included for permit applicability. The installation is subject to 40 CFR part 60 Subpart WWW-*Standards of Performance for Municipal Solid Waste Landfills*, however has not triggered the requirements to install controls. Therefore, the flare is operated voluntarily and is not required to comply with Subpart WWW nor 40 CFR part 60 Subpart A. A Part 70 Operating Permit is required due to potential emissions of SO_x and the requirements of Subpart WWW.



Prepared by
Nicole Weidenbenner, PE
Operating Permit Unit



Director or Designee
Department of Natural Resources
FEB 02 2018
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.

EP #	Description
EU1	Landfill
EU5	100 gallon gasoline tank
EU6	1,300 SCFM Candlestick Flare
EU8	85 gallon gasoline tank
EU11	Flare Back Up Generator, propane fired
IA1	2,000 gallon diesel fuel tank
IA20	12,000 gallon diesel fuel tank
IA2	500 gallon diesel fuel tank
EU4	2,500 gallon diesel fuel tank
EU2	Paved haul roads
EU3	Unpaved haul roads
	Used Oil Heater, MHDR= 0.5 MMBtu/hr
EU7	Leachate evaporator (LFG combustion at 0.01152 MMCF/hr and 0.4 1,000 gallons leachate/hr)
IA18	LFG fueled heater #1 (LFG combustion at 2 SCFM)
IA19	LFG fueled heater #2 (LFG combustion at 2 SCFM)
	Propane-Fueled Heater #1, MHDR= 0.25 MMBtu/hr
	Propane-Fueled Heater #2, MHDR= 0.25 MMBtu/hr
	Propane-Fueled Heater #3, MHDR= 0.25 MMBtu/hr

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.

EP #	Description
IA3	100 gallon used oil tank
IA4	100 gallon gear oil tank 1
IA5	100 gallon gear oil tank 2
IA6	100 gallon gear oil tank 3
IA7	200 gallon hydraulic oil tank
IA8	100 gallon hydraulic oil tank
IA9	200 gallon engine oil tank
IA10	100 gallon engine oil tank
	1,000-gallon propane tank, pressurized tank
IA11	1,000 gallon propane tank, , pressurized tank
IA12	500 gallon propane tank, , pressurized tank
IA13	35,000 gallon leachate storage tank
IA14	35,000 gallon leachate storage tank
IA15	500,000 gallon leachate bladder tank
EU9	Solidification Basin

II. Plant Wide Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued. The plant wide conditions apply to all emission units at this installation. This section applies to regulations that apply on an entire-installation wide basis. The following general conditions apply to all units contained in this permit, unless stated otherwise.

Monitoring:

The permittee shall calibrate, maintain and operate all pollution control devices and pollution monitoring related instruments according to the manufacturer's recommendations, or maintenance and operational history of similar units. All calibrations, maintenance, and operations shall occur according to good engineering practices. All manufacturing specifications and operational/maintenance histories shall be kept on site.

Recordkeeping:

1. The permittee shall record all required record keeping in an appropriate format.
2. Records may be kept electronically using database or workbook systems, as long as all required information is readily available for compliance determinations.
3. The permittee shall keep a copy of this operating permit and review, copies of all issued construction permits and reviews, and copies of all Safety Data Sheets (SDS) on site.
4. All records must be kept for a minimum of 5 years and be made available to department personnel upon request.

Performance Testing:

When performance testing is required by a condition of this permit, one electronic copy of a written report of the performance test results shall be submitted to stacktesting@dnr.mo.gov within the timeframe required by the regulation that requires the testing. If no time frame is specified, the report shall be submitted within sixty days. The report shall include legible copies of the raw data sheets, analytical instrument laboratory data, and complete sample calculations from the required U.S. EPA Method for at least one sample run.

Reporting:

1. The permittee shall report any exceedance of any of the terms imposed by this permit, or any malfunction which could cause an exceedance of any of the terms imposed by this permit, no later than ten days after the exceedance or event causing the exceedance (unless otherwise specified in the specific condition).
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 Air Pollution Control Program's Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov.

Permit Condition PW1

10 CSR 10-6.060, Construction Permits Required
Construction Permit 072003-010B, issued May 30, 2006

This requirement is a State Only permit requirement.

Special Condition # 4: As requested by the director, the permittee shall submit a corrective action plan, within 10 days of the request (or alternate schedule if approved by the director) that is adequate to timely and significantly mitigate the causes of any demonstrated nuisance odors. The permittee shall implement any such plan immediately upon its approval by the director. Failure to either submit such a corrective action plan if requested, or to implement such a plan after approval by the director shall be a violation.

Permit Condition PW2

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:

The permittee shall meet the following requirements:

1. Either there must be no visible emissions to the outside air from any active waste disposal site where asbestos-containing waste material has been deposited, or the requirements of §61.154(c) or (d) must be met. [§61.154(a)]
2. Unless a natural barrier adequately deters access by the general public, either warning signs and fencing must be installed and maintained as follows, or the requirements of §61.154(c)(1) must be met. [§61.154(b)]
 - a. Warning signs must be displayed at all entrances and at intervals of 100 m (330 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 is deposited. The warning signs must:
 - i. Be posted in such a manner and location that a person can easily read the legend; and
 - ii. Conform to the requirements of 51 cm × 36 cm (20 inch;×14 inch;) upright format signs specified in 29 CFR 1910.145(d)(4) and this paragraph; and
 - iii. Display the following legend in the lower panel with letter sizes and styles of a visibility at least equal to those specified in this paragraph. Spacing between any two lines must be at least equal to the height of the upper of the two lines.
Legend Notation
Asbestos Disposal Site..... 2.5 cm (1 inch) Sans Serif, Gothic or Block.
Do Not Create Dust..... 1.9 cm (3/4 inch) Sans Serif, Gothic or Block.
Breathing Asbestos is Hazardous to Your Health..... 14 Point Gothic.
 - b. The perimeter of the disposal site must be fenced in a manner adequate to deter access by the general public.
 - c. Upon request and supply of appropriate information, the director will determine whether a fence or a natural barrier adequately deters access by the general public.
3. Rather than meet the no visible emission requirement of §61.154(a), at the end of each operating day, or at least once every 24-hour period while the site is in continuous operation, the asbestos containing waste material that has been deposited at the site during the operating day or previous 24-hour period shall: [§61.154(c)]
 - a. Be covered with at least 15 centimeters (6 inches) of compacted non-asbestos-containing material, or [§61.154(c)(1)]

- b. Be covered with a resinous or petroleum-based dust suppression agent that effectively binds dust and controls wind erosion. Such an agent shall be used in the manner and frequency recommended for the particular dust by the dust suppression agent manufacturer to achieve and maintain dust control. Other equally effective dust suppression agents may be used upon prior approval by the director. For purposes of this paragraph, any used, spent, or other waste oil is not considered a dust suppression agent. [§61.154(c)(2)]
4. Rather than meet the no visible emission requirement of §61.154(a), use an alternative emissions control method that has received prior written approval by the Administrator according to the procedures described in §61.149(c)(2). [§61.154(d)]

Recordkeeping/Reporting:

1. For all asbestos-containing waste material received, the permittee shall: [§61.154(e)]
 - a. Maintain waste shipment records, using a form similar to that shown in Figure 4 of 40 CFR 61.149, and include the following information:
 - i. The name, address, and telephone number of the waste generator.
 - ii. The name, address, and telephone number of the transporter(s).
 - iii. The quantity of the asbestos-containing waste material in cubic meters (cubic yards).
 - iv. The presence of improperly enclosed or uncovered waste, or any asbestos-containing waste material not sealed in leak-tight containers. Report in writing to the local, state, or EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator (identified in the waste shipment record), and, if different, the Missouri Department of Natural Resources, by the following working day, the presence of a significant amount of improperly enclosed or uncovered waste. Submit a copy of the waste shipment record along with the report.
 - v. The date of the receipt.
 - b. As soon as possible and no longer than 30 days after receipt of the waste, send a copy of the signed waste shipment record to the waste generator.
 - c. Upon discovering a discrepancy between the quantity of waste designated on the waste shipment records and the quantity actually received, attempt to reconcile the discrepancy with the waste generator. If the discrepancy is not resolved within 15 days after receiving the waste, immediately report in writing to the local, state, or EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator (identified in the waste shipment record), and, if different, the Missouri Department of Natural Resources. Describe the discrepancy and attempts to reconcile it, and submit a copy of the waste shipment record along with the report.
 - d. Retain a copy of all records and reports required by this paragraph for at least five years.
2. Maintain, until closure, records of the location, depth and area, and quantity in cubic meters (cubic yards) of asbestos-containing waste material within the disposal site on a map or diagram of the disposal area. [§61.154(f)]
3. Upon closure, comply with all the provisions of §61.151. [§61.154(g)]
4. Submit to the director, upon closure of the facility, a copy of records of asbestos waste disposal locations and quantities. [§61.154(h)]
5. Furnish upon request, and make available during normal business hours for inspection by the director, all records required under this section. [§61.154(i)]
6. 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 and is covered. 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: [§61.154(j)]

- a. Scheduled starting and completion dates.
- b. Reason for disturbing the waste.
- 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.
- d. Location of any temporary storage site and the final disposal site.

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
EU1	Landfill

Emission Limitations:

The permittee shall calculate an NMOC emission rate for the landfill using the procedures specified in §60.754. The NMOC emission rate shall be recalculated annually, except as provided in §60.757(b)(1)(ii). [§60.752(b)]

1. If the calculated NMOC emission rate is less than 50 megagrams per year, the permittee shall:
[§60.752(b)(1)]
 - a. Submit an annual emission report to the director, except as provided for in §60.757(b)(1)(ii); and [§60.752(b)(1)(i)]
 - b. Recalculate the NMOC emission rate annually using the procedures specified in §60.754(a)(1) until such time as the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, or the landfill is closed. [§60.752(b)(1)(ii)]
 - i. If the NMOC emission rate, upon recalculation required in §60.752(b)(1)(ii), is equal to or greater than 50 megagrams per year, the permittee shall install a collection and control system in compliance with §60.752(b)(2). [§60.752(b)(1)(ii)(A)]

Test Methods and Procedures:

1. The permittee shall calculate NMOC emission rates according to the following procedures.
 - a. The permittee shall calculate the NMOC emission rate using either the equation provided in §60.754(a)(1)(i) or the equation provided in §60.754(a)(1)(ii). [§60.754(a)(1)]
 - b. If conducting Tier 1 testing, the permittee shall conduct the testing in compliance with §60.754(a)(2).
 - c. If conducting Tier 2 testing, the permittee shall conduct the testing in compliance with §60.754(a)(3).
 - d. If conducting Tier 3 testing, the permittee shall conduct the testing in compliance with §60.754(a)(4).
 - e. The permittee may use other methods to determine the NMOC concentration or a site-specific k as an alternative to the methods required in §60.754(a)(3) and (a)(4) if the method has been approved by the director. [§60.754(a)(5)]
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)]

Reporting:

1. An amended design capacity report shall be submitted to the director providing notification of an increase in the design capacity of the landfill, within 90 days of an increase in the maximum design capacity of the landfill to or above 2.5 million megagrams and 2.5 million cubic meters. This increase in design capacity may result from an increase in the permitted volume of the landfill or an increase in the density as documented in the annual recalculation required in §60.758(f). [§60.757(a)(3)]
2. The permittee shall submit an NMOC emission rate report to the director initially and annually thereafter, except as provided for in §60.757(b)(1)(ii). The director may request such additional information as may be necessary to verify the reported NMOC emission rate. [§60.757(b)]
 - a. The NMOC emission rate report shall contain an annual or 5-year estimate of the NMOC emission rate calculated using the formula and procedures provided in §60.754(a) or (b), as applicable. [§60.757(b)(1)]
 - i. The initial NMOC emission rate report may be combined with the initial design capacity report required in §60.757(a) and shall be submitted no later than indicated in §60.757(b)(1)(i)(B). Subsequent NMOC emission rate reports shall be submitted annually thereafter, except as provided for in §60.757(b)(1)(ii). [§60.757(b)(1)(i)]
 - A. Ninety days after the date of commenced construction, modification, or reconstruction for landfills that commence construction, modification, or reconstruction on or after March 12, 1996. [§60.757(b)(1)(i)(B)]
 - ii. If the estimated NMOC emission rate as reported in the annual report to the director is less than 50 megagrams per year in each of the next 5 consecutive years, the permittee may elect to submit an estimate of the NMOC emission rate for the next 5-year period in lieu of the annual report. This estimate shall include the current amount of solid waste-in-place and the estimated waste acceptance rate for each year of the 5 years for which an NMOC emission rate is estimated. All data and calculations upon which this estimate is based shall be provided to the director. This estimate shall be revised at least once every 5 years. If the actual waste acceptance rate exceeds the estimated waste acceptance rate in any year reported in the 5-year estimate, a revised 5-year estimate shall be submitted to the director. The revised estimate shall cover the 5-year period beginning with the year in which the actual waste acceptance rate exceeded the estimated waste acceptance rate. [§60.757(b)(1)(ii)]
 - b. The NMOC emission rate report shall include all the data, calculations, sample reports and measurements used to estimate the annual or 5-year emissions. [§60.757(b)(2)]

Recordkeeping:

The permittee 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)]

Permit Condition MACT CCCCCC 40 CFR Part 63, Subpart A General Provisions Subpart CCCCCC, National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities	
EP #	Description
EU5	100 gallon gasoline tank
EU8	85 gallon gasoline tank

Applicability:

1. The permittee with a GDF with a monthly throughput of less than 10,000 gallons of gasoline must comply with the requirements in §63.11116. [§63.11111(b)]
2. The permittee shall, upon request by the Administrator, demonstrate the monthly throughput is less than 10,000 gallons. Recordkeeping to document monthly throughput must begin in January 10, 2008. [§63.11111(e)]
3. If the throughput of the GDF ever exceeds an applicable throughput threshold, the permittee shall remain subject to the requirements for sources above the threshold, even if the throughput later falls below the applicable throughput threshold. [§3.11111(i)]

Emission Limitations:

1. The permittee must, at all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [§63.11115(a)]
2. The permittee must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following: [§63.11116(a)(1) through (4)]
 - a. Minimize gasoline spills;
 - b. Clean up spills as expeditiously as practicable;
 - c. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;
 - d. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.
3. The permittee is not required to submit notifications or reports as specified in §63.11125, §63.11126, or subpart A of this part, but must have records available within 24 hours of a request by the Administrator to document the gasoline throughput. [§63.11116(b)]
4. The permittee must comply with the requirements of this subpart by the applicable dates specified in §63.11113. [§63.111165(c)]
5. Portable gasoline containers that meet the requirements of 40 CFR part 59, subpart F, are considered acceptable for compliance with §63.1116(a)(3). [§63.11116(d)]

Recordkeeping:

The permittee shall keep records as specified in §63.11125(d)(1) and (2). [§63.11125(d)]

1. Records of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment. [§63.11125(d)(1)]

2. Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.11115(a), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [§63.11125(d)(2)]

Permit Condition NSPS JJJJ	
40 CFR Part 60, Subpart A General Provisions	
Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	
EP #	Description
EU11	Flare Back Up Generator, Mfr: Generac, Model: SG100/3000336640, Four stroke, Constructed 5/25/2016, propane fired, MHDR: 118 kW, 157.67 BHP

Emission Limitations:

1. The permittee must comply with the emission standards in §60.4231(c) for their stationary SI ICE. [§60.4233(c)]
 - a. The engine manufacturer must certify the engines to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 1048. [§60.4231(c)]
2. The permittee must operate and maintain stationary SI ICE that achieve the emission standards as required in §60.4233 over the entire life of the engine. [§60.4234]

Operational Limitations:

The permittee shall install a non-resettable hour meter on each engine. [§60.4237(b) and (c)]

Compliance Requirements:

1. The permittee must comply by purchasing an engine certified to the emission standards in §60.4231(c), for the same engine class and maximum engine power. In addition, you must meet one of the requirements specified in §60.4243(a)(1) and (2). [§60.4243(a)]
 - a. If the permittee operates and maintains the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, you must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required by the permittee. You must also meet the requirements as specified in 40 CFR part 1068, subparts A through D, as applicable. If you adjust engine settings according to and consistent with the manufacturer's instructions, your stationary SI internal combustion engine will not be considered out of compliance. [§60.4243(a)(1)]
 - b. If the permittee does not operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, your engine will be considered a non-certified engine, and you must demonstrate compliance according to §60.4243(a)(2)(i) through (iii). [§60.4243(a)(2)]
2. The permittee must operate the emergency stationary ICE according to the requirements in §60.4243(d)(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 §60.4243(d)(1) through (3), is prohibited. If you do not operate the engine according to the requirements in §60.4243(d)(1) through (3), the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines. [§60.4243(d)]
 - a. There is no time limit on the use of emergency stationary ICE in emergency situations. [§60.4243(d)(1)]

- b. The permittee may operate your emergency stationary ICE for any combination of the purposes specified in §60.4243(d)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by §60.4243(d)(3) counts as part of the 100 hours per calendar year allowed by §60.4243(d)(2). [§60.4243(d)(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. [§60.4243(d)(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 §60.4243(d)(2). The 50 hours per 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 or otherwise supply power as part of a financial arrangement with another entity. [§60.4243(d)(3)]

General Provisions:

The permittee shall comply with the general provisions in §§60.1 through 60.19 as detailed in Table 3 of this subpart.

Notification, Reporting, and Recordkeeping Requirements:

1. The permittee must keep records of the information in §60.4245(a)(1) through (4). [§60.4245(a)]
 - a. All notifications submitted to comply with this subpart and all documentation supporting any notification. [§60.4245(a)(1)]
 - b. Maintenance conducted on the engine. [§60.4245(a)(2)]
 - c. If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable. [§60.4245(a)(3)]
 - d. If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to §60.4243(a)(2), documentation that the engine meets the emission standards. [§60.4245(a)(4)]
2. The permittee shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. [§60.4245(b)]

Permit Condition 072003-010B	
10 CSR 10-6.060, Construction Permits Required Construction Permit 072003-010B, issued May 30, 2006	
EP #	Description
EU2	Paved haul roads
EU3	Unpaved haul roads

Operational Limitation:

1. Special Condition #2: The permittee shall consistently and correctly use the application of a water spray on the unpaved haul roads. This periodic watering shall be applied whenever conditions exist that would allow visible fugitive emissions from these sources to enter the ambient air beyond the property boundaries.
2. Special Condition # 3B.: The permittee shall consistently and correctly water and/or wash paved haul roads. This periodic watering/washing shall be applied whenever conditions exist that would allow visible fugitive emissions from these sources to enter the ambient air beyond the property boundaries.

Monitoring/Recordkeeping:

The permittee shall document haul road watering and/or washing.

Permit Condition 042016-001	
10 CSR 10-6.060, Construction Permits Required Construction Permit 042016-001, issued April 4, 2016 Construction Permit Amendment 042016-001A, issued July 17, 2017	
EP #	Description
EU6	1,300 SCFM Candlestick Flare, Mfr: Parnel Biogas, Inc, Model #PUF-12B/, Constructed 4/7/2016

Gas Flow Rate Monitoring:

1. Special Condition #1.A.: The permittee shall install, calibrate, and maintain a gas flow rate measuring device that shall record the flow of landfill gas to the flare.
2. Special Condition # 1.B.: The flow rate of the landfill gas shall be recorded at regular intervals throughout the day (ie hourly) so that a daily average flow rate can accurately be established.
3. Special Condition # 1.C.: Mechanical malfunction, inclement weather, power outage, force majeure, etc. that leads to a loss of flow data is not considered a violation of this special condition, as long as the incident, its impact on flow data, and all corrective actions are documented.
4. Special Condition # 1.D.: The flow meter shall be located such that Department of Natural Resources' personnel may easily observe it.

Permit Condition 6.220	
10 CSR 10-6.220, Restriction of Emissions of Visible Air Contaminants	
2016 EIQ #	Description
	Used Oil Heater, MHDR= 0.5 MMBtu/hr, installed post 1971

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.]

Monitoring/Recordkeeping:

None, See Statement of Basis

Permit Condition 6.260	
10 CSR 10-6.260, Restriction of Emission of Sulfur Compounds	
2016 EIQ #	Description
EU6	1,300 SCFM Candlestick Flare, Mfr: Parnel Biogas, Inc, Model #PUF-12B/, Constructed 4/7/2016
	Used Oil Heater, MHDR= 0.5 MMBtu/hr, installed post 1971
EU7	Leachate evaporator (LFG combustion at 0.01152 MMCF/hr and 0.4 1,000 gallons leachate/hr)
IA18	LFG fueled heater #1 (LFG combustion at 2 SCFM)
IA19	LFG fueled heater #2 (LFG combustion at 2 SCFM)

This regulation is federally enforceable.

Emission Limitation:

1. For EU6: The permittee shall not cause or permit the emission into the atmosphere gases containing more than five hundred parts per million by volume (500 ppmv) of sulfur dioxide of more than thirty-five milligrams per cubic meter (35 mg/m³) of sulfuric acid or sulfur trioxide or any combination of those gases averaged on any consecutive three hour time period.
2. For the Used Oil Heater: The permittee shall not cause or allow emissions of sulfur dioxide into the atmosphere from any indirect heating source in excess of 8 lbs SO₂/MMBtu actual heat input averaged on any consecutive three hour time period. [6.260(3)(B)2.A.]

Monitoring/Recordkeeping:

None, See Statement of Basis

Permit Condition 6.405	
10 CSR 10-6.405, Restriction of Particulate Matter Emissions From Fuel Burning Equipment Used for Indirect Heating	
2016 EIQ #	Description
	Used Oil Heater, MHDR= 0.5 MMBtu/hr, installed post 1971
EU7	Leachate evaporator (LFG combustion at 0.01152 MMCF/hr and 0.4 1,000 gallons leachate/hr)
IA18	LFG fueled heater #1 (LFG combustion at 2 SCFM)
IA19	LFG fueled heater #2 (LFG combustion at 2 SCFM)
	Propane-Fueled Heater #1, MHDR= 0.25 MMBtu/hr
	Propane-Fueled Heater #2, MHDR= 0.25 MMBtu/hr
	Propane-Fueled Heater #3, MHDR= 0.25 MMBtu/hr

Emission Limitation:

The permittee shall not emit particulate matter in excess of 0.60 pounds per million BTU of heat input.

Monitoring/Recordkeeping:

None, See Statement of Basis

IV. Core Permit Requirements

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

10 CSR 10-6.045 Open Burning Requirements

- 1) General Provisions. The open burning of tires, petroleum-based products, asbestos containing materials, and trade waste is prohibited, except as allowed below. Nothing in this rule may be construed as to allow open burning which causes or constitutes a public health hazard, nuisance, a hazard to vehicular or air traffic, nor which violates any other rule or statute.
- 2) Certain types of materials may be open burned provided an open burning permit is obtained from the director. The permit will specify the conditions and provisions of all open burning. The permit may be revoked if the owner or operator fails to comply with the conditions or any provisions of the permit.

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

- 1) In the event of a malfunction, which results in excess emissions that exceed one hour, the permittee shall submit to the director within two business days, in writing, the following information:
 - a) Name and location of installation;
 - b) Name and telephone number of person responsible for the installation;
 - c) Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered.
 - d) Identity of the equipment causing the excess emissions;
 - e) Time and duration of the period of excess emissions;
 - f) Cause of the excess emissions;
 - g) Air pollutants involved;
 - h) Estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;
 - i) Measures taken to mitigate the extent and duration of the excess emissions; and
 - j) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.
- 2) The permittee shall submit the paragraph 1 information to the director in writing at least ten days prior to any maintenance, start-up or shutdown activity which is expected to cause an excessive release of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the planned occurrence, notice shall be given as soon as practicable prior to the activity.
- 3) Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under section 643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the paragraph 1 list and shall be submitted not later than 15 days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other pertinent information available, the director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under section 643.080 or 643.151, RSMo.

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

10 CSR 10-6.060 Construction Permits Required

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

10 CSR 10-6.065 Operating Permits

The permittee shall file a complete application for renewal of this operating permit at least six months before the date of permit expiration. In no event shall this time be greater than eighteen months. The permittee shall retain the most current operating permit issued to this installation on-site. The permittee shall immediately make such permit available to any Missouri Department of Natural Resources personnel upon request.

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

- 1) The permittee shall submit a Full Emissions Report either electronically via MoEIS, which requires Form 1.0 signed by an authorized company representative, or on Emission Inventory Questionnaire (EIQ) paper forms on the frequency specified in this rule and in accordance with the requirements outlined in this rule. Alternate methods of reporting the emissions, such as a spreadsheet file, can be submitted for approval by the director.
- 2) Public Availability of Emission Data and Process Information. Any information obtained pursuant to the rule(s) of the Missouri Air Conservation Commission that would not be entitled to confidential treatment under 10 CSR 10-6.210 shall be made available to any member of the public upon request.
- 3) The permittee shall pay an annual emission fee per ton of regulated air pollutant emitted according to the schedule in the rule. This fee is an emission fee assessed under authority of RSMo. 643.079.

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

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

10 CSR 10-6.150 Circumvention

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

10 CSR 10-6.165 Restriction of Emission of Odors

This requirement is a State Only permit requirement.

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

10 CSR 10-6.170

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

Emission Limitation:

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

Monitoring:

The permittee shall conduct inspections of its facilities sufficient to determine compliance with this regulation. If the permittee discovers a violation, the permittee shall undertake corrective action to eliminate the violation.

The permittee shall maintain the following monitoring schedule:

- 1) The permittee shall conduct weekly observations for a minimum of eight (8) consecutive weeks after permit issuance.
- 2) Should no violation of this regulation be observed during this period then-
 - a) The permittee may observe once every two (2) weeks for a period of eight (8) weeks.
 - b) If a violation is noted, monitoring reverts to weekly.
 - c) Should no violation of this regulation be observed during this period then-
 - i) The permittee may observe once per month.
 - ii) If a violation is noted, monitoring reverts to weekly.
- 3) If the permittee reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner to the initial monitoring frequency.

Recordkeeping:

The permittee shall document all readings on Attachment 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 10-6.280 Compliance Monitoring Usage

- 1) The permittee is not prohibited from using the following in addition to any specified compliance methods for the purpose of submission of compliance certificates:
 - a) Monitoring methods outlined in 40 CFR Part 64;
 - b) Monitoring method(s) approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
 - c) Any other monitoring methods approved by the director.
- 2) Any credible evidence may be used for the purpose of establishing whether a permittee has violated or is in violation of any such plan or other applicable requirement. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at an installation:
 - a) Monitoring methods outlined in 40 CFR Part 64;
 - b) A monitoring method approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
 - c) Compliance test methods specified in the rule cited as the authority for the emission limitations.
- 3) The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
 - a) Applicable monitoring or testing methods, cited in:
 - i) 10 CSR 10-6.030, "Sampling Methods for Air Pollution Sources";
 - ii) 10 CSR 10-6.040, "Reference Methods";
 - iii) 10 CSR 10-6.070, "New Source Performance Standards";
 - iv) 10 CSR 10-6.080, "Emission Standards for Hazardous Air Pollutants"; or
 - b) Other testing, monitoring, or information gathering methods, if approved by the director, that produce information comparable to that produced by any method listed above.

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

- 1) The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
 - a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to 40 CFR §82.106.
 - b) The placement of the required warning statement must comply with the requirements of 40 CFR §82.108.

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- c) The form of the label bearing the required warning statement must comply with the requirements of 40 CFR §82.110.
 - d) No person may modify, remove, or interfere with the required warning statement except as described in 40 CFR §82.112.
 - 2) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B of 40 CFR Part 82:
 - a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices described in 40 CFR §82.156.
 - b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment described in 40 CFR §82.158.
 - c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR §82.161.
 - d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with the record keeping requirements of 40 CFR §82.166. ("MVAC-like" appliance as defined at 40 CFR §82.152).
 - e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to 40 CFR §82.156.
 - f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR §82.166.
 - 3) If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
 - 4) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements contained in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.
 - 5) The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *Federal Only - 40 CFR Part 82.*

V. General Permit Requirements

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

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

10 CSR 10-6.065(6)(E)3.C Extension of Expired Permits

This permit is issued for a term of five years, commencing on the date of issuance. This permit will expire at the end of this period unless renewed. If a timely and complete application for a permit renewal is submitted, but the Air Pollution Control Program fails to take final action to issue or deny the renewal permit before the end of the term of this permit, this permit shall not expire until the renewal permit is issued or denied.

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

- 1) Record Keeping
 - a) All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.
 - b) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources' personnel upon request.
- 2) Reporting
 - a) All reports shall be submitted to the Air Pollution Control Program, Compliance and Enforcement Section, P. O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov.
 - b) The permittee shall submit a report of all required monitoring by:
 - i) October 1st for monitoring which covers the January through June time period, and
 - ii) April 1st for monitoring which covers the July through December time period.
 - c) Each report shall identify any deviations from emission limitations, monitoring, record keeping, reporting, or any other requirements of the permit, this includes deviations or Part 64 exceedances.
 - d) Submit supplemental reports as required or as needed. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
 - i) Notice of any deviation resulting from an emergency (or upset) condition as defined in paragraph (6)(C)7.A of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.

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

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

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

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

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

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

- 1) The permittee must comply with all of the terms and conditions of this permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, permit termination, permit revocation and re-issuance, permit modification or denial of a permit renewal application.
- 2) The permittee may not use as a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit
- 3) The permit may be modified, revoked, reopened, reissued or terminated for cause. Except as provided for minor permit modifications, the filing of an application or request for a permit modification, revocation and reissuance, or termination, or the filing of a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- 4) This permit does not convey any property rights of any sort, nor grant any exclusive privilege.
- 5) The permittee shall furnish to the Air Pollution Control Program, upon receipt of a written request and within a reasonable time, any information that the Air Pollution Control Program reasonably may require to determine whether cause exists for modifying, reopening, reissuing or revoking the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the Air Pollution Control Program copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 10 CSR 10-6.065(6)(C)1.

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

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

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

None

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

- 1) Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official.
- 2) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the Missouri Department of Natural Resources, or their authorized agents, to perform the following (subject to the installation's right to seek confidential treatment of information submitted to, or obtained by, the Air Pollution Control Program):
 - a) Enter upon the premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
 - b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c) Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 - d) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.
- 3) All progress reports required under an applicable schedule of compliance shall be submitted 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. All deviations and Part 64 exceedances and excursions must be included in the compliance certifications. The compliance certification shall include the following:
 - a) The identification of each term or condition of the permit that is the basis of the certification;
 - b) The current compliance status, as shown by monitoring data and other information reasonably available to the installation;
 - c) Whether compliance was continuous or intermittent;
 - d) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period; and

- e) Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

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

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

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

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

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

An installation that has been issued a Part 70 operating permit is not required to apply for or obtain a permit revision in order to make any of the changes to the permitted installation described below if the changes are not Title I modifications, the changes do not cause emissions to exceed emissions allowable under the permit, and the changes do not result in the emission of any air contaminant not previously emitted. The permittee shall notify the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Blvd.,

Lenexa, KS 66219, at least seven days in advance of these changes, except as allowed for emergency or upset conditions. Emissions allowable under the permit means a federally enforceable permit term or condition determined at issuance to be required by an applicable requirement that establishes an emissions limit (including a work practice standard) or a federally enforceable emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.

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

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

- 1) Except as noted below, the permittee may make any change in its permitted operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Insignificant activities listed in the permit, but not otherwise addressed in or prohibited by this permit, shall not be considered to be constrained by this permit for purposes of the off-permit provisions of this section. Off-permit changes shall be subject to the following requirements and restrictions:
 - a) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; the permittee may not change a permitted installation without a permit revision if this change is subject to any requirements under Title IV of the Act or is a Title I modification;
 - b) The permittee must provide contemporaneous written notice of the change to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219. This notice shall not be required for changes that are insignificant activities under 10 CSR 10-6.065(6)(B)3 of this rule. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change.
 - c) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes; and
 - d) The permit shield shall not apply to these changes.

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

The application utilized in the preparation of this permit was signed by Brady Stewart, MO/AR Area Engineer. If this person terminates employment, or is reassigned different duties such that a different person becomes the responsible person to represent and bind the installation in environmental permitting

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

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

This permit shall be reopened for cause if:

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

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

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

VI. Attachments

Attachments follow.

STATEMENT OF BASIS

INSTALLATION DESCRIPTION

Timber Ridge Landfill is a municipal solid waste landfill with a design capacity of 10,866,160 Megagrams. It is a non-codisposal, open landfill that has accepted waste since 2003. The installation does not appear on the list of Named Installations, therefore fugitives are not included for permit applicability. The installation is subject to 40 CFR part 60 Subpart W^{WW}-*Standards of Performance for Municipal Solid Waste Landfills*, however has not triggered the requirements to install controls. Therefore, the flare is operated voluntarily and is not required to comply with Subpart W^{WW} nor 40 CFR part 60 Subpart A. A Part 70 Operating Permit is required due to the SO_x emissions and the requirements of Subpart W^{WW}.

The last five years of reported emissions and the installations potential to emit are presented in the table below. The potential to emit was taken from calculations provided by the installation and includes fugitive emissions. The emergency generator was evaluated at 500 hours per year, and all other units were evaluated at their maximum hourly design rates and continuous operation. Landfill emissions were based on the flare maximum hourly design rate, not the landfill gas generation rate. Landfill gas combustion was evaluated using the final AP42 Section 2.4, Municipal Solid Waste Landfills, with a landfill gas sulfur content conservatively estimated at 3,500 ppmv. However, the carbon monoxide and nitrogen oxides potentials were adjusted using emission factors of 39 lb NO_x/MMSCF methane, and 62.4 lb CO/MMSCF methane; sourced from the draft AP42 Section 2.4 and a statistical analysis of the background documents. Reported emissions for carbon monoxide are greater than potentials because the installation uses an emission factor of 750 lb CO/MMSCF methane from the final AP-42 Section 2.4. Reported emissions for volatile organics are greater than potentials due to different calculation methodologies for landfill fugitive emissions.

Table 1: Emissions Profile, tons per year

Pollutants	Reported Emissions					Potential Emissions
	2012	2013	2014	2015	2016	
Particulate Matter ≤ Ten Microns (PM ₁₀)	1.84	2.01	1.89	10.85	12.76	124.43
Particulate Matter ≤ 2.5 Microns (PM _{2.5})	0.80	0.60	0.61	1.97	2.61	12.41
Sulfur Oxides (SO _x)	0.57	0.35	0.38	0.80	81.88	202.21
Nitrogen Oxides (NO _x)	1.62	1.01	1.09	2.31	5.49	7.58
Volatile Organic Compounds (VOC)	3.20	5.54	5.55	0.61	0.79	2.45
Carbon Monoxide (CO)	30.34	18.92	20.43	44.81	33.63	12.58
Hazardous Air Pollutants (HAPs)	0.68	0.88	0.89	0.32	0.48	6.48

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 June 20, 2011, revised June 30, 2016;
- 2) 2016 Emissions Inventory Questionnaire, received April 26, 2017;
- 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 Determinations

Other Air Regulations Determined Not to Apply to the Operating Permit

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

See Other Regulatory Determinations

Construction Permit History

The following construction permits were issued to this installation:

1. Construction Permit 072003-010
This permit was issued for initial construction of the landfill. The permitted site capacity is 20,000,000 cubic yards (10,886, 160 Mg). This permit was superseded by 072003-010B.
2. Construction Permit 072003-010A
This permit amendment was issued October 15, 2003 to revise the ambient impact factor for the waste haul road due to new paving. This permit was superseded by 072003-010B.
3. Construction Permit 072003-010B
This permit amendment was issued May 30, 2006. This permit amendment supersedes all conditions in Construction Permit 072003-010 and 072003-010A. The special conditions of this permit appear as permit conditions in the operating permit, with the exception of the paving requirement. The installation has satisfied this requirement and paved roads as required.
4. No Permit Required Letter, PAMS 2008-02-025
This letter was issued March 5, 2008 for repaving of the haul road. Potential emissions are less than the construction permitting exemption thresholds, therefore no construction permit is required.
5. Construction Permit 112010-007
This permit was issued November 15, 2010 for installation of a 500 SCFM flare. This permit does not contain any special conditions.
6. Construction Permit 102011-006

This permit was issued October 7, 2011 to modify the 500 SCFM flare to 2,000 SCFM. This permit does not contain any special conditions. This project was not completed, therefore the permit is no longer valid.

7. No Permit Required Letter, PAMS 2011-11-044
 This letter was issued February 8, 2012 for the installation of a landfill gas fired leachate evaporator. Potential emissions are less than the construction permitting exemption thresholds, therefore no construction permit is required.
8. Construction Permit 042016-001
 This permit was issued April 4, 2016 for the replacement of the 500 SCFM flare with a 2,000 SCFM flare. Special condition #1 appears as a permit condition in this operating permit, special condition #2 was repealed in amendment 042016-001A.
9. Construction Permit 042016-001A
 This amendment was issued July 17, 2017 and repeals the requirements of special condition #2 of Construction Permit 042016-001. The installation conducted testing over a thirteen month period, well in excess of the required six month period. Testing results indicate the average sulfur concentration in the landfill gas during the entire testing period was 2,420 ppmv, which is less than the 3,500 ppmv value used for the construction permit.
10. Construction Permit 072003-010C
 This amendment was issued October 11, 2017 and corrects the regulatory references for 10 CSR 10-4.070, Restriction of Emission of Odors to the correct regulation 10 CSR 10-6.165, Restriction of Emission of Odors. Additionally, in the application the installation requested a change in the timeline for the submission of odor plans. The request was not granted at this time.

New Source Performance Standards (NSPS) Applicability

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:

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 petroleum liquid storage tanks at this installation have capacities less than 19,813 gallons, and therefore are not subject to these subparts. The leachate 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 calculated to be approximately 0.006 kPa. 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.

The Timber Ridge Landfill has a design capacity greater than 2.5 million megagrams and 2.5 million cubic meters. The NMOC emission rate is less than 50 Mg per year, as demonstrated with Tier 2 NMOC Sampling and Testing that was conducted in November/December 2012. Based on the results of the LANDGEM model using the site-specific emission data, the mass emission rate of NMOC for the landfill in 2012 is 30.1 Mg/year. The maximum annual NMOC emission rate over the next 5 years (through November/December 2017) is estimated to be 44.5 Mg/year. Therefore the landfill meets the requirements of 40 CFR 60.754(a)(3)(iii).

Because the emission rate during the term of this operating permit is anticipated to be less than 50 Mg/year NMOC, the provisions of this subpart requiring the installation of controls have not been included in this operating permit. The flare is not considered a control device under this subpart at this time. When the landfill is required to install control devices under subpart WWW, then this unit will be considered a control device. If the installation becomes subject to the requirements to install controls during the lifetime of this operating permit, an operating permit modification request must be submitted.

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. Therefore this regulation does not apply.

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

This regulation applies to spark ignition engines. The flare back up generator, EU11, is operated as emergency engine to provide backup power to the gas moving equipment in case of power failure. The provisions applicable to emergency engines are included in the permit condition for this regulation. The engine does not operate according to the provisions of §60.4243(d)(3)(i), to supply power as part of a financial arrangement, therefore those provisions and associated recordkeeping do not appear in the permit.

40 CFR part 60 Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

This regulation applies to compression ignition engines. All engines at this installation are spark 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 subpart does not apply to Timber Ridge Landfill. The installation is not required to install control equipment to comply with 40 CFR part 60 Subpart WWW at the time of permit issuance. When the landfill becomes subject to the control requirements of Subpart WWW, then the installation will also be subject to this subpart.

40 CFR Part 63 Subpart CCCCC, National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities

This subpart applies to area sources of HAPs. The tanks each have a monthly throughput less than 10,000 gallons. The applicable provisions of this regulation appear 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 engines meet the requirements of this part by complying with the requirements of NSPS JJJJ, as specified in §63.6590(c). Therefore, this regulation does not appear in the operating permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability

40 CFR Part 61, Subpart M, National Emission Standards for Asbestos

This regulation has sections that apply to active waste disposal sites that receive asbestos containing materials. This regulation applies and appears in the Operating Permit as Permit Condition PW1.

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 control devices at this installation are not yet subject to emission limitations in NSPS subpart WWW. When they become subject, they will qualify for this exemption because NSPS subpart WWW was proposed on May 30, 1991. Currently, the flare is not used to comply with an applicable requirement; therefore CAM does not currently apply. In the future, when the flares are required, they will meet the exemption cited above and CAM would 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 CO₂ emissions in their Missouri Emissions Inventory Questionnaire; therefore, the installation's CO₂ 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 CO₂ emissions data by visiting <http://epa.gov/ghgreporting/ghgdata/reportingdatasets.html>.

Other Regulatory Determinations

Removed Equipment

During the course of the permit review, the installation indicated the following equipment has been removed from site: EU6a-500 SCFM Candlestick Flare and EU10 Flare Back Up Generator. Therefore, these emission units do not appear in the operating permit.

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

The emission units at this installation meet various exemptions as detailed in the following table. The tanks and solidification basin are not expected to emit opacity.

EP #	Unit Description	Exemption
EU1	Landfill	Fugitive particulate emissions, exemption (1)(K)
EU2	Paved haul road-solid waste	Fugitive particulate emissions, exemption (1)(K)
EU3	Unpaved haul road-cover soil	Fugitive particulate emissions, exemption (1)(K)
EU6	1,300 SCFM Candlestick Flare	Combusts landfill gas, exemption (1)(L)
EU6a	500 SCFM Candlestick Flare	Combusts landfill gas, exemption (1)(L)
EU7	Leachate evaporator (LFG combustion at 0.01152 MMCF/hr and 0.4 1,000 gallons leachate/hr)	Combusts landfill gas, exemption (1)(L)
IA18	LFG fueled heater #1 (LFG combustion at 2 SCFM)	Combusts landfill gas, exemption (1)(L)
IA19	LFG fueled heater #2 (LFG combustion at 2 SCFM)	Combusts landfill gas, exemption (1)(L)
EU11	Flare Back Up Generator, propane fired	Internal combustion engine, exemption (1)(A)
	Propane-Fueled Heater #1, MHDR= 0.25 MMBtu/hr	Combusts propane, exemption (1)(L)
	Propane-Fueled Heater #2, MHDR= 0.25 MMBtu/hr	Combusts propane, exemption (1)(L)
	Propane-Fueled Heater #3, MHDR= 0.25 MMBtu/hr	Combusts propane, exemption (1)(L)

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 propane combustion meets exemption (1)(A)2. This regulation applies to all the landfill gas combustion equipment and appears as a permit condition. According to testing conducted on site, the average sulfur concentration of the landfill gas is 2,420 ppmv. To be consistent with the value used for the potential to emit, the emissions are based on a sulfur concentration of 3,500 ppmv. Using the calculation methodology from AP42, the sulfur emissions are estimated at 44.73 lbs SO_x/hr. Using the flare maximum design rate and standard conversions, the estimated SO_x value from the flare is 0.0004 ppmv. This much less than the limit of 500 ppmv, therefore monitoring and recordkeeping are not required.

The potential emissions of the used oil heater are estimated with an emission factor of $107 * S$ lb/1000 gallons and a heating value of 140 MMBtu/1000 gallons (AP42 Section 1.11). Using these values, the potential emissions of the used oil heater are estimated at $0.764 * S$ lb SO₂/MMBtu in any one hour period. With an emission limitation of 8 lbs SO₂/MMBtu over any 3 hour period (6.261(3)(B)1.), the sulfur content (S) may not exceed 10.46% by weight. According to the document "Vermont Used Oil Analysis and Waste Oil Furnace Emissions Study", from March 1996, the average sulfur content of the waste oil analyzed in the study was 0.36% by weight. Therefore, it is not expected that the sulfur content of the used oil would approach 10.46% and no monitoring or recordkeeping is required in the permit condition for the used oil heater.

10 CSR 10-6.261, *Control of Sulfur Dioxide Emissions*

This regulation applies to all sources of sulfur dioxide. There are no provisions in the regulation for combustion of landfill gas. There is a sulfur content limitation for diesel; however, the diesel is used to fuel mobile sources which are not regulated under Title V permitting. The propane combustion meets exemption (1)(A). The waste oil space heater meets exemption (1)(C)2., as it is subject to 10 CSR 10-6.260. Therefore, this regulation does not appear in the operating permit.

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 began accepting waste in 2003, therefore it does not meet the applicability of this regulation. The landfill is subject to NSPS Subpart WWW.

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.

10 CSR 10-6.405, *Restriction of Particulate Matter Emissions From Fuel Burning Equipment Used for Indirect Heating*

This regulation applies to the Used Oil Heater, the Leachate Evaporator, the LFG fueled heaters and the Propane Heaters. The Leachate Evaporator, the LFG fueled heaters and the Propane Heaters all meet the provisions of 6.405(1)(C), which states emission units that use specific fuels, including propane and landfill gas, are deemed in compliance with this regulation. The Used Oil Heater, has potential emissions that do not exceed the emission limitation imposed by this rule, as shown below. All landfill gas conversions are based on a heating value of 476 Btu/ft³:

EP#	Description	MHDR (MMBtu/hr)
	Used Oil Heater	0.5
EU7	Leachate evaporator	5.48
IA18	LFG fueled heater #1	0.057
IA19	LFG fueled heater #2	0.057
	Propane-Fueled Heater #1	0.25
	Propane-Fueled Heater #2	0.25
	Propane-Fueled Heater #3	0.25
Total Q=		6.84

The PM emission limitation for installations with a total heat input less than 10 MMBtu/hr is 0.60 lb/MMBtu.

EP#	Description	Emission Factor (lb/1000 gallons)	Emission Factor (lb/MMBtu)	Emission Limit (lb/MMBtu)
	Used Oil Heater	2.8*A	0.011	0.60

The emission factor is estimated using AP-42, Table 1.11-1, which provides a PM emission factor of 2.8A, where A is the % ash content, and a heating value of 140 MMBtu/1000 gallons. According to the document Vermont Used Oil Analysis and Waste Oil Furnace Emissions Study, 1996, Table 1, a conservative ash content value for used oil is 0.55%. These calculations indicate the potential emissions of this unit are substantially less than the limit, therefore no monitoring or recordkeeping is required for the waste oil space heater.

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 Timber Ridge Landfill was placed on public notice October 27, 2017 for a 30-day comment period. The public notice was published on the Department of Natural Resources' Air Pollution Control Program's web page at: <http://www.dnr.mo.gov/env/apcp/PermitPublicNotices.htm> . Public comments were received from Ms. Leslye Werner, EPA Region 7. The comments are addressed in the order in which they appear within the letter(s).

Comment #1: Permit Condition PW1 incorporates a special condition from Permit to Construct #072003-010B issued May 30, 2006. This permit condition requires the permittee to submit a corrective action plan, within 10 days of the request (or alternate schedule if approved by the director) that is adequate to timely and significantly mitigate the causes of any demonstrated nuisance odor. Nuisance odor control is not regulated by the United States Environmental Protection Agency and therefore, EPA suggests MDNR consider identifying Permit Condition PW1 as a "State Only Requirement."

Response to Comment #1: Clarification has been provided in the permit that Permit Condition PW1 is a State Only Requirement.

Comment #2: In the Other Regulatory Determinations section of the Statement of Basis (page SB-6) it states: "10 CSR 10-6.260-Restriction of Emission of Sulfur Compounds was rescinded from the state regulations (CSR). However, this regulation is still contained in Missouri's State Implementation Plan (SIP). This regulation is a federally enforceable requirement (emphasis added) until it is removed from the SIP, therefore it must appear in this Operating Permit."

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

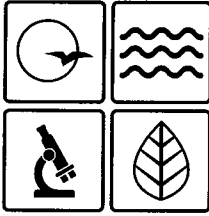
Additionally, the Emission Unit ribbon banner, associated with Permit Condition 6.260, includes a footnote which says: "This regulation is federally enforceable." All applicable permit conditions included in an operating permit issued pursuant to 40 CFR Part 70 are enforceable by the EPA; therefore, this footnote although correct is unnecessary and MDNR might want to consider removing the footnote.

Response to Comment #2: As noted in the comment regarding Permit Condition 6.260, the notation indicating this requirement is federally enforceable is correct. Therefore no changes have been made.

Comment #3: Operational Limitation 2., in Permit Condition 072003-010B requires the permittee to *periodically* (emphasis added) water and/or wash the paved portion of the haul roads such that no *appreciable* (emphasis added) visible emission of particulate matter is allowed to occur from the surface of the paved haul road. Also, Gas Flow Rate Monitoring requirement 2, in Permit Condition 042016-001, requires the permittee to record the landfill gas flow rate at *regular intervals* (emphasis added) throughout the day (ie hourly) so that a daily average flow rate can accurately be established. The terms *periodically*, *appreciable*, and *regular intervals* are too vague, so as to be enforceable in a practical matter. If the flow rate is to be recorded hourly, then EPA believes that MDNR consider modifying the language in Gas Flow Rate Monitoring requirement 2, in Permit Condition 042016-001 and eliminate

the vagueness and strengthen the practical enforceability. Similarly, EPA suggests MDNR consider modifying the language in Operation Limitation 2., in Permit Condition 072003-010B to eliminate the vagueness to strengthen its practical enforceability.

Response to Comment #3: Permit Condition 072003-010B, Operational Limitation 2 has been modified to clarify the intent of this condition, which is to require the permittee to water/wash the paved haul roads to prevent fugitive emissions to enter the ambient air beyond the property line. Permit Condition 042016-001, Gas Flow Rate Monitoring 2 has not been changed. The installation has not met the conditions of any regulation that could require or restrict the use of the flare. Therefore at this time, operation of the flare is voluntary. Requiring more stringent monitoring data on a voluntary control device is overly burdensome and does not improve compliance or air quality.



Missouri Department of dnr.mo.gov

NATURAL RESOURCES

Eric R. Greitens, Governor

Carol S. Comer, Director

FEB 02 2018

Mr. Brady Stewart
Timber Ridge Landfill
12581 State Highway H
Richwoods, MO 63071

Re: Part 70 Operating Permit Renewal
Installation ID: 221-0031, Permit Number: OP2018-014

Dear Mr. Stewart:

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

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

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

If you have any questions or need additional information regarding this permit, please contact the Air Pollution Control Program (APCP) at (573) 751-4817, or you may write to the Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

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

MJS:nwj

Enclosures

c: PAMS File: 2011-06-054



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