

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: OP2011-025
Expiration Date: MAY 22 2016
Installation ID: 207-0062
Project Number: 2010-06-075

Installation Name and Address

Lemons Sanitary Landfill
15250 Old Bloomfield Drive
Dexter, MO 63841
Stoddard County

Parent Company's Name and Address

Republic Services, Inc.
1540 Landfill Road
DeSoto, IL 62924

Installation Description:

Lemons Sanitary Landfill operates an existing Municipal Solid Waste landfill with a current capacity of 4.967 million cubic meters in Dexter, Missouri. The facility is a major source of Carbon Monoxide (CO). The primary source of CO emissions at the installation is a flare which combusts landfill gas generated by the landfill.

MAY 23 2011

Effective Date

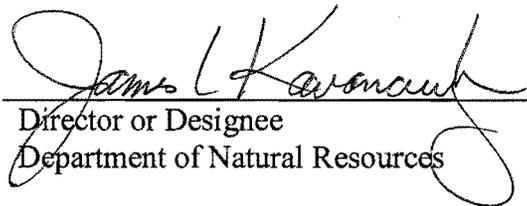

Director or Designee
Department of Natural Resources

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I. Installation Description and Equipment Listing

INSTALLATION DESCRIPTION

Lemons Sanitary Landfill operates an existing Municipal Solid Waste landfill with a current capacity of 4.967 million cubic meters in Dexter, Missouri. The facility is a major source of Carbon Monoxide (CO). The primary source of CO emissions at the installation is a flare which combusts landfill gas generated by the landfill.

Reported Air Pollutant Emissions, tons per year					
	2009	2008	2007	2006	2005
Particulate Matter \leq Ten Microns (PM ₁₀)	8.27	6.84	6.61	15.21	19.33
Particulate Matter \leq 2.5 Microns (PM _{2.5})	2.26	2.05	1.48	1.43	1.34
Sulfur Oxides (SO _x)	1.47	1.41	1.43	1.26	1.15
Nitrogen Oxides (NO _x)	3.77	3.62	3.50	3.38	3.17
Volatile Organic Compounds (VOC)	2.41	2.33	2.28	2.21	2.07
Carbon Monoxide (CO)	69.95	67.28	65.22	63.19	59.25
Hazardous Air Pollutants (HAPs)	0.95	0.91	0.88	0.86	0.81

EMISSION UNITS WITH LIMITATIONS

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

Emission Unit	Description
1	Landfill
2	Haul Road A
3	Haul Road B
4	Haul Road C
7	Waste Oil Space Heater
8	Open Flare
9	Propane Heater

EMISSION UNITS WITHOUT LIMITATIONS

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

Emission Unit	Description
5	Tank 1- 10,000 Gal Diesel Fuel Storage
6	Tank 2 - 10,000 Gal Diesel Fuel Storage

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.

None.

III. Emission Unit Specific Emission Limitations

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

PERMIT CONDITION 001				
10 CSR 10-3.060 Maximum Allowable Emissions of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating				
Emission Unit	Description	MHDR (MMBtu/hr)	Fuel	Stack No.
7	Space Heater	1.95	Waste Oil	7
9	Heater	0.396	Propane	-

Emission Limitation:

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

Operational Limitation:

The permittee shall calibrate, maintain and operate the emission units according to the manufacturer’s specifications and recommendations.

Monitoring/Record Keeping:

Attachment C contains calculations which demonstrate that these emission units will never exceed the emission limitation while burning the specified fuel. The permittee shall retain Attachment C with this permit.

Reporting:

The permittee shall report any deviations from the manufacturer’s specifications and recommendations in the semi-annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 002	
10 CSR 10-6.070 New Source Performance Regulations	
40 CFR Part 60, Subpart WWW – Standards of Performance for Municipal Solid Waste Landfills	
Emission Unit	Description
1	4.967 Million Cubic Meter Landfill
8	Open Flare

Definitions:

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act or in subpart A of this part. [§60.751]

Closed landfill means a landfill in which solid waste is no longer being placed, and in which no additional solid wastes will be placed without first filing a notification of modification as prescribed under §60.7(a)(4). Once a notification of modification has been filed, and additional solid waste is placed in the landfill, the landfill is no longer closed.

Municipal Solid Waste Landfill Standards:

1. For each MSW landfill having a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters, the permittee shall either comply with Paragraph (b)(2) of this section. [§60.752(b)]
 - a) For each MSW landfill with a calculated NMOC emission rate equal to or greater than 50 megagrams per year, the permittee shall: [§60.752(b)(2)]
 - i) Maintain a collection and control system that captures the gas generated within the landfill as required by Paragraphs (b)(2)(ii)(A) and (b)(2)(iii) of this section. [§60.752(b)(2)(ii)]
 - (1) An active collection system shall: [§60.752(b)(2)(ii)(A)]
 - (a) Be designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control or treatment system equipment; [§60.752(b)(2)(ii)(A)(1)]
 - (b) Collect gas from each area, cell, or group of cells in the landfill in which the initial solid waste has been placed for a period of: [§60.752(b)(2)(ii)(A)(2)]
 - (i) 5 years or more if active; or [§60.752(b)(2)(ii)(A)(2)(i)]
 - (ii) 2 years or more if closed or at final grade. [§60.752(b)(2)(ii)(A)(2)(ii)]
 - (c) Collect gas at a sufficient extraction rate; [§60.752(b)(2)(ii)(A)(3)]
 - (d) Be designed to minimize off-site migration of subsurface gas. [§60.752(b)(2)(ii)(A)(4)]
 - ii) Route all the collected gas to a control system that complies with the requirements in Paragraph (b)(2)(iii)(A) of this section. [§60.752(b)(2)(iii)]
 - (1) An open flare designed and operated in accordance with §60.18 except as noted in §60.754(e); [§60.752(b)(2)(iii)(A)]
 - iii) Operate the collection and control device installed to comply with this subpart in accordance with the provisions of §60.753, §60.755 and §60.756. [§60.752(b)(2)(iv)]
 - iv) The collection and control system may be capped or removed provided that all the conditions of Paragraphs (b)(2)(v)(A), (B), and (C) of this section are met: [§60.752(b)(2)(v)]
 - (1) The landfill shall be a closed landfill as defined in §60.751 of this subpart. A closure report shall be submitted to the Administrator as provided in §60.757(d); [§60.752(b)(2)(v)(A)]
 - (2) The collection and control system shall have been in operation a minimum of 15 years; and [§60.752(b)(2)(v)(B)]
 - (3) Following the procedures specified in §60.754(b) of this subpart, the calculated NMOC gas produced by the landfill shall be less than 50 megagrams per year on three successive test dates. The test dates shall be no less than 90 days apart, and no more than 180 days apart. [§60.752(b)(2)(v)(C)]
 2. When a MSW landfill subject to this subpart is closed, the permittee is no longer subject to the requirement to maintain an operating permit under Part 70 or 71 of this chapter for the landfill if the landfill is not otherwise subject to the requirements of either Part 70 or 71 and if the following conditions are met: [§60.752(d)]
 - a) The permittee meets the conditions for control system removal specified in Paragraph (b)(2)(v) of this section. [§60.752(d)(2)]

Collection and Control System Standards:

1. For each MSW landfill with a gas collection and control system used to comply with the provisions of §60.752(b)(2)(ii) of this subpart, the permittee shall: [§60.753]
 - a) Operate the collection system such that gas is collected from each area, cell, or group of cells in the MSW landfill in which solid waste has been in place for: [§60.753(a)]
 - i) Five years or more if active; or [§60.753(a)(1)]
 - ii) Two years or more if closed or at final grade; [§60.753(a)(2)]
 - b) Operate the collection system with negative pressure at each wellhead except under the following conditions: [§60.753(b)]
 - i) A fire or increased well temperature. The permittee shall record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports as provided in §60.757(f)(1); [§60.753(b)(1)]
 - ii) Use of a geomembrane or synthetic cover. The permittee shall develop acceptable pressure limits in the design plan; [§60.753(b)(2)]
 - iii) A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes shall be approved by the Administrator; [§60.753(b)(3)]
 - c) Operate each interior wellhead in the collection system with a landfill gas temperature less than 55 °C and with either a nitrogen level less than 20 percent or an oxygen level less than five percent. The permittee may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens. [§60.753(c)]
 - i) The nitrogen level shall be determined using Method 3C. [§60.753(c)(1)]
 - ii) The oxygen shall be determined by an oxygen meter using Method 3A or 3C except that: [§60.753(c)(2)]
 - (1) The span shall be set so that the regulatory limit is between 20 and 50 percent of the span; [§60.753(c)(2)(i)]
 - (2) A data recorder is not required; [§60.753(c)(2)(ii)]
 - (3) Only two calibration gases are required, a zero and span, and ambient air may be used as the span; [§60.753(c)(2)(iii)]
 - (4) A calibration error check is not required; [§60.753(c)(2)(iv)]
 - (5) The allowable sample bias, zero drift, and calibration drift are ±10 percent. [§60.753(c)(2)(v)]
 - d) Operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill. To determine if this level is exceeded, the permittee shall conduct surface testing around the perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. The permittee may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan shall be developed that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30 meter intervals. Areas with steep slopes or other dangerous areas may be excluded from the surface testing. [§60.753(d)]

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

Test Methods and Procedures:

1. The permittee shall calculate the NMOC emission rate using either the equation provided in Paragraph (a)(1)(i) of this section or the equation provided in Paragraph (a)(1)(ii) of this section. Both equations may be used if the actual year-to-year solid waste acceptance rate is known, as specified in Paragraph (a)(1)(i), for part of the life of the landfill and the actual year-to-year solid waste acceptance rate is unknown, as specified in Paragraph (a)(1)(ii), for part of the life of the landfill. The values to be used in both equations are 0.05 per year for k, 170 cubic meters per megagram for L_o, and 4,000 parts per million by volume as hexane for the C_{NMOC}. For landfills located in geographical areas with a thirty year annual average precipitation of less than 25 inches, as measured at the nearest representative official meteorologic site, the k value to be used is 0.02 per year. [§60.754(a)(1)]

a) The following equation shall be used if the actual year-to-year solid waste acceptance rate is known.

$$M_{NMOC} = \sum_{i=1}^n 2kL_oM_i(e^{-kt_i})(C_{NMOC})(3.6 \times 10^{-9})$$

Where:

M_{NMOC} = Total NMOC emission rate from the landfill, megagrams per year

k = methane generation rate constant, year⁻¹

L_o = methane generation potential, cubic meters per megagram solid waste

M_i = mass of solid waste in the ith section, megagrams

t_i = age of the ith section, years

C_{NMOC} = concentration of NMOC, parts per million by volume as hexane

3.6 × 10⁻⁹ = conversion factor

The mass of nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value for M_i if documentation of the nature and amount of such wastes is maintained [§60.754(a)(1)(i)]

b) The following equation shall be used if the actual year-to-year solid waste acceptance rate is unknown.

$$M_{NMOC} = 2L_oR(e^{-kc} - e^{-kt})C_{NMOC}(3.6 \times 10^{-9})$$

Where:

M_{NMOC} = mass emission rate of NMOC, megagrams per year

L_o = methane generation potential, cubic meters per megagram solid waste

R = average annual acceptance rate, megagrams per year

k = methane generation rate constant, year⁻¹

t = age of landfill, years

C_{NMOC} = concentration of NMOC, parts per million by volume as hexane

c = time since closure, years; for active landfill $c = 0$ and $e^{-kc} = 1$

3.6×10^{-9} = conversion factor

The mass of nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value of R , if documentation of the nature and amount of such wastes is maintained. [§60.754(a)(1)(ii)]

- c) *Tier 1.* The permittee shall compare the calculated NMOC mass emission rate to the standard of 50 megagrams per year. [§60.754(a)(2)]
 - i) For calculated NMOC emission rates equal to or greater than 50 megagrams per year, the permittee shall comply with §60.752(b)(2). [§60.754(a)(2)(ii)]
2. After the installation of a collection and control system in compliance with §60.755, the permittee shall calculate the NMOC emission rate for purposes of determining when the system can be removed as provided in §60.752(b)(2)(v), using the following equation:

$$M_{\text{NMOC}} = 1.89 \times 10^{-3} Q_{\text{LFG}} C_{\text{NMOC}}$$

Where:

M_{NMOC} = mass emission rate of NMOC, megagrams per year

Q_{LFG} = flow rate of landfill gas, cubic meters per minute

C_{NMOC} = NMOC concentration, parts per million by volume as hexane. [§60.754(b)]

- a) The flow rate of landfill gas, Q_{LFG} , shall be determined by measuring the total landfill gas flow rate at the common header pipe that leads to the control device using a gas flow measuring device calibrated according to the provisions of section 4 of Method 2E of Appendix A of this part. [§60.754(b)(1)]
 - b) The average NMOC concentration, C_{NMOC} , shall be determined by collecting and analyzing landfill gas sampled from the common header pipe before the gas moving or condensate removal equipment using the procedures in Method 25C or Method 18 of Appendix A of this part. If using Method 18 of Appendix A of this part, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The sample location on the common header pipe shall be before any condensate removal or other gas refining units. The permittee shall divide the NMOC concentration from Method 25C of Appendix A of this part by six to convert from C_{NMOC} as carbon to C_{NMOC} as hexane. [§60.754(b)(2)]
 - c) The permittee may use another method to determine landfill gas flow rate and NMOC concentration if the method has been approved by the Administrator. [§60.754(b)(3)]
3. 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)]
 4. For the performance test required in §60.752(b)(2)(iii)(A), the net heating value of the combusted landfill gas as determined in §60.18(f)(3) is calculated from the concentration of methane in the landfill gas as measured by Method 3C. A minimum of three 30-minute Method 3C samples are determined. The measurement of other organic components, hydrogen, and carbon monoxide is not applicable. Method 3C may be used to determine the landfill gas molecular weight for calculating the flare gas exit velocity under §60.18(f)(4). [§60.754(e)]

Compliance:

1. The specified methods in Paragraphs (a)(1) through (a)(5) of this section shall be used to determine whether the gas collection system is in compliance with §60.752(b)(2)(ii). [§60.755(a)]
- a) For the purposes of calculating the maximum expected gas generation flow rate from the landfill to determine compliance with §60.752(b)(2)(ii)(A)(1), one of the following equations shall be used. The k and L_o kinetic factors should be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42) or other site specific values demonstrated to be appropriate and approved by the Administrator. A value of no more than 15 years shall be used for the intended use period of the gas mover equipment. The active life of the landfill is the age of the landfill plus the estimated number of years until closure. [§60.755(a)(1)]

- i) For sites with unknown year-to-year solid waste acceptance rate:

$$Q_m = 2L_oR(e^{-kc} - e^{-kt})$$

Where:

Q_m = maximum expected gas generation flow rate, cubic meters per year

L_o = methane generation potential, cubic meters per megagram solid waste

R = average annual acceptance rate, megagrams per year

k = methane generation rate constant, year⁻¹

t = age of the landfill at equipment installation plus the time the permittee intends to use the gas mover equipment or active life of the landfill, whichever is less. If the equipment is installed after closure, t is the age of the landfill at installation, years

c = time since closure, years (for an active landfill $c = 0$ and $e^{-kc} = 1$) [§60.755(a)(1)(i)]

- ii) For sites with known year-to-year solid waste acceptance rate:

$$Q_M = \sum_{i=1}^n 2kL_oM_i(e^{-kt_i})$$

Where:

Q_M = maximum expected gas generation flow rate, cubic meters per year

k = methane generation rate constant, year⁻¹

L_o = methane generation potential, cubic meters per megagram solid waste

M_i = mass of solid waste in the i^{th} section, megagrams

t_i = age of the i^{th} section, years [§60.755(a)(1)(ii)]

- iii) If a collection and control system has been installed, actual flow data may be used to project the maximum expected gas generation flow rate instead of, or in conjunction with, the equations in Paragraphs (a)(1)(i) and (ii) of this section. If the landfill is still accepting waste, the actual measured flow data will not equal the maximum expected gas generation rate, so calculations using the equations in Paragraphs (a)(1)(i) or (ii) or other methods shall be used to predict the maximum expected gas generation rate over the intended period of use of the gas control system equipment. [§60.755(a)(1)(iii)]
- b) For the purposes of determining sufficient density of gas collectors for compliance with §60.752(b)(2)(ii)(A)(2), the permittee shall design a system of vertical wells, horizontal collectors, or other collection devices, satisfactory to the Administrator, capable of controlling and extracting gas from all portions of the landfill sufficient to meet all operational and performance standards. [§60.755(a)(2)]
- c) For the purpose of demonstrating whether the gas collection system flow rate is sufficient to determine compliance with §60.752(b)(2)(ii)(A)(3), the permittee shall measure gauge pressure in the gas collection header at each individual well, monthly. If a positive pressure exists, action shall be initiated to correct the exceedance within five calendar days, except for the three

conditions allowed under §60.753(b). If negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial measurement of positive pressure. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Administrator for approval. [§60.755(a)(3)]

- d) The permittee is not required to expand the system as required in Paragraph (a)(3) of this section during the first 180 days after gas collection system startup. [§60.755(a)(4)]
 - e) For the purpose of identifying whether excess air infiltration into the landfill is occurring, the permittee shall monitor each well monthly for temperature and nitrogen or oxygen as provided in §60.753(c). If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within five calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Administrator for approval. [§60.755(a)(5)]
2. For purposes of compliance with §60.753(a), the permittee shall place each well or design component as specified in the approved design plan. Each well shall be installed no later than 60 days after the date on which the initial solid waste has been in place for a period of: [§60.755(b)]
 - a) Five years or more if active; or [§60.755(b)(1)]
 - b) Two years or more if closed or at final grade. [§60.755(b)(2)]
 3. The following procedures shall be used for compliance with the surface methane operational standard as provided in §60.753(d). [§60.755(c)]
 - a) After installation of the collection system, the permittee shall monitor surface concentrations of methane along the entire perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals (or a site-specific established spacing) for each collection area on a quarterly basis using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in Paragraph (d) of this section. [§60.755(c)(1)]
 - b) The background concentration shall be determined by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells. [§60.755(c)(2)]
 - c) Surface emission monitoring shall be performed in accordance with Section 4.3.1 of Method 21 of Appendix A of this part, except that the probe inlet shall be placed within five to ten centimeters of the ground. Monitoring shall be performed during typical meteorological conditions. [§60.755(c)(3)]
 - d) Any reading of 500 parts per million or more above background at any location shall be recorded as a monitored exceedance and the actions specified in Paragraphs (c)(4)(i) through (v) of this section shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of §60.753(d). [§60.755(c)(4)]
 - i) The location of each monitored exceedance shall be marked and the location recorded. [§60.755(c)(4)(i)]
 - ii) Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each exceedance shall be made and the location shall be re-monitored within ten calendar days of detecting the exceedance. [§60.755(c)(4)(ii)]

- iii) If the re-monitoring of the location shows a second exceedance, additional corrective action shall be taken and the location shall be monitored again within ten days of the second exceedance. If the re-monitoring shows a third exceedance for the same location, the action specified in Paragraph (c)(4)(v) of this section shall be taken, and no further monitoring of that location is required until the action specified in Paragraph (c)(4)(v) has been taken. [§60.755(c)(4)(iii)]
- iv) Any location that initially showed an exceedance but has a methane concentration less than 500 ppm methane above background at the ten-day re-monitoring specified in Paragraph (c)(4)(ii) or (iii) of this section shall be re-monitored one month from the initial exceedance. If the one-month re-monitoring shows a concentration less than 500 parts per million above background, no further monitoring of that location is required until the next quarterly monitoring period. If the one-month re-monitoring shows an exceedance, the actions specified in Paragraph (c)(4)(iii) or (v) shall be taken. [§60.755(c)(4)(iv)]
- v) For any location, where monitored methane concentration equals or exceeds 500 parts per million above background three times within a quarterly period, a new well or other collection device shall be installed within 120 calendar days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes or control device, and a corresponding timeline for installation may be submitted to the Administrator for approval. [§60.755(c)(4)(v)]
- e) The permittee shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis. [§60.755(c)(5)]
- 4. To comply with the provisions in Paragraph (c) of this section, the permittee shall comply with the following instrumentation specifications and procedures for surface emission monitoring devices: [§60.755(d)]
 - a) The portable analyzer shall meet the instrument specifications provided in Section 3 of Method 21 of Appendix A of this part, except that “methane” shall replace all references to VOC. [§60.755(d)(1)]
 - b) The calibration gas shall be methane, diluted to a nominal concentration of 500 parts per million in air. [§60.755(d)(2)]
 - c) To meet the performance evaluation requirements in Section 3.1.3 of Method 21 of Appendix A of this part, the instrument evaluation procedures of Section 4.4 of Method 21 of Appendix A of this part shall be used. [§60.755(d)(3)]
 - d) The calibration procedures provided in Section 4.2 of Method 21 of Appendix A of this part shall be followed immediately before commencing a surface monitoring survey. [§60.755(d)(4)]
- 5. The provisions of this subpart apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed 5 days for collection systems and shall not exceed 1 hour for treatment or control devices. [§60.755(e)]

Monitoring:

- 1. To comply with §60.752(b)(2)(ii)(A) for an active gas collection system, the permittee shall install a sampling port and a thermometer, other temperature measuring device, or an access port for temperature measurements at each wellhead and: [§60.756(a)]
 - a) Measure the gauge pressure in the gas collection header on a monthly basis as provided in §60.755(a)(3); and [§60.756(a)(1)]
 - b) Monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis as provided in §60.755(a)(5); and [§60.756(a)(2)]

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

Active Collection System Specifications:

1. The permittee shall site active collection wells, horizontal collectors, surface collectors, or other extraction devices at a sufficient density throughout all gas producing areas using the following procedures unless alternative procedures have been approved by the Administrator: [§60.759(a)]
 - a) The collection devices within the interior and along the perimeter areas shall be certified to achieve comprehensive control of surface gas emissions by a professional engineer. The following issues shall be addressed in the design: depths of refuse, refuse gas generation rates and flow characteristics, cover properties, gas system expandability, leachate and condensate management, accessibility, compatibility with filling operations, integration with closure end use, air intrusion control, corrosion resistance, fill settlement, and resistance to the refuse decomposition heat. [§60.759(a)(1)]
 - b) The sufficient density of gas collection devices determined in Paragraph (a)(1) of this section shall address landfill gas migration issues and augmentation of the collection system through the use of active or passive systems at the landfill perimeter or exterior. [§60.759(a)(2)]
 - c) The placement of gas collection devices determined in Paragraph (a)(1) of this section shall control all gas producing areas, except as provided by Paragraphs (a)(3)(i) and (a)(3)(ii) of this section. [§60.759(a)(3)]
 - i) Any segregated area of asbestos or nondegradable material may be excluded from collection if documented as provided under §60.758(d). The documentation shall provide the nature, date of deposition, location and amount of asbestos or nondegradable material deposited in the area, and shall be provided to the Administrator upon request. [§60.759(a)(3)(i)]

- ii) Any nonproductive area of the landfill may be excluded from control, provided that the total of all excluded areas can be shown to contribute less than 1 percent of the total amount of NMOC emissions from the landfill. The amount, location, and age of the material shall be documented and provided to the Administrator upon request. A separate NMOC emissions estimate shall be made for each section proposed for exclusion, and the sum of all such sections shall be compared to the NMOC emissions estimate for the entire landfill. Emissions from each section shall be computed using the following equation:

$$Q_i = 2kL_oM_i(e^{-kt_i})(C_{NMOC})(3.6 \times 10^{-9})$$

Where:

Q_i = NMOC emission rate from the i^{th} section, megagrams per year

k = methane generation rate constant, year^{-1}

L_o = methane generation potential, cubic meters per megagram solid waste

M_i = mass of the degradable solid waste in the i^{th} section, megagram

t_i = age of the solid waste in the i^{th} section, years

C_{NMOC} = concentration of nonmethane organic compounds, parts per million by volume

3.6×10^{-9} = conversion factor [§60.759(a)(3)(ii)]

- iii) The values for k and C_{NMOC} determined in field testing shall be used if field testing has been performed in determining the NMOC emission rate or the radii of influence (this distance from the well center to a point in the landfill where the pressure gradient applied by the blower or compressor approaches zero). If field testing has not been performed, the default values for k , L_o , and C_{NMOC} provided in §60.754(a)(1). The mass of nondegradable solid waste contained within the given section may be subtracted from the total mass of the section when estimating emissions provided the nature, location, age, and amount of the nondegradable material is documented as provided in Paragraph (a)(3)(i) of this section. [§60.759(a)(3)(iii)]

2. The permittee shall construct the gas collection devices using the following equipment or procedures: [§60.759(b)]

- a) The landfill gas extraction components shall be constructed of polyvinyl chloride (PVC), high density polyethylene (HDPE) pipe, fiberglass, stainless steel, or other nonporous corrosion resistant material of suitable dimensions to: convey projected amounts of gases; withstand installation, static, and settlement forces; and withstand planned overburden or traffic loads. The collection system shall extend as necessary to comply with emission and migration standards. Collection devices such as wells and horizontal collectors shall be perforated to allow gas entry without head loss sufficient to impair performance across the intended extent of control. Perforations shall be situated with regard to the need to prevent excessive air infiltration. [§60.759(b)(1)]
- b) Vertical wells shall be placed so as not to endanger underlying liners and shall address the occurrence of water within the landfill. Holes and trenches constructed for piped wells and horizontal collectors shall be of sufficient cross-section so as to allow for their proper construction and completion including, for example, centering of pipes and placement of gravel backfill. Collection devices shall be designed so as not to allow indirect short circuiting of air into the cover or refuse into the collection system or gas into the air. Any gravel used around pipe perforations should be of a dimension so as not to penetrate or block perforations. [§60.759(b)(2)]

- c) Collection devices may be connected to the collection header pipes below or above the landfill surface. The connector assembly shall include a positive closing throttle valve, any necessary seals and couplings, access couplings and at least one sampling port. The collection devices shall be constructed of PVC, HDPE, fiberglass, stainless steel, or other nonporous material of suitable thickness. [§60.759(b)(3)]
3. The permittee shall convey the landfill gas to a control system in compliance with §60.752(b)(2)(iii) through the collection header pipe(s). The gas mover equipment shall be sized to handle the maximum gas generation flow rate expected over the intended use period of the gas moving equipment using the following procedures: [§60.759(c)]
 - a) For existing collection systems, the flow data shall be used to project the maximum flow rate. If no flow data exists, the procedures in Paragraph (c)(2) of this section shall be used. [§60.759(c)(1)]
 - b) For new collection systems, the maximum flow rate shall be in accordance with §60.755(a)(1). [§60.759(c)(2)]

Record Keeping:

1. The permittee shall keep for at least five 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 four hours. Either paper copy or electronic formats are acceptable. [§60.758(a)]
2. The permittee shall keep up-to-date, readily accessible records for the life of the control equipment of the data listed in Paragraphs (b)(1) through (b)(4) of this section as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of five years. Records of the control device vendor specifications shall be maintained until removal. [§60.758(b)]
 - a) To demonstrate compliance with §60.752(b)(2)(ii): [§60.758(b)(1)]
 - i) The maximum expected gas generation flow rate as calculated in §60.755(a)(1). The permittee may use another method to determine the maximum gas generation flow rate, if the method has been approved by the Administrator. [§60.758(b)(1)(i)]
 - ii) The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in §60.759(a)(1). [§60.758(b)(1)(ii)]
 - b) To demonstrate compliance with §60.752(b)(2)(iii)(A) through use of an open flare, the flare type (i.e., steam-assisted, air-assisted, or nonassisted), all visible emission readings, heat content determination, flow rate or bypass flow rate measurements, and exit velocity determinations made during the performance test as specified in §60.18; continuous records of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame of the flare flame is absent. [§60.758(b)(4)]
3. The permittee shall keep for five years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in §60.756 as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded. [§60.758(c)]
 - a) The permittee shall keep up-to-date, readily accessible continuous records of the indication of flow to the control device or the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines, specified under §60.756. [§60.758(c)(2)]

- b) To comply with the provisions of this subpart by use of an open flare, the permittee shall keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified under §60.756(c), and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent. [§60.758(c)(4)]
4. The permittee shall keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector. [§60.758(d)]
 - a) The permittee shall keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors as specified under §60.755(b). [§60.758(d)(1)]
 - b) The permittee shall keep readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing or nondegradable waste excluded from collection as provided in §60.759(a)(3)(i) as well as any nonproductive areas excluded from collection as provided in §60.759(a)(3)(ii). [§60.758(d)(2)]
5. The permittee shall keep for at least five years up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in §60.753, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance. [§60.758(e)]
6. The permittee shall keep each record readily accessible to Department of Natural Resources' employees upon request. Records shall be kept in hard copy or electronic form for at least five years after the date of each occurrence, measurement, maintenance, corrective action, report, or record.

Reporting:

1. The permittee shall submit the initial design capacity report to the Administrator. [§60.757(a)]
 - a) The initial design capacity report shall fulfill the requirements of the notification of the date construction is commenced as required by §60.7(a)(1) and shall be submitted no later than: [§60.757(a)(1)]
 - i) 90 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(a)(1)(ii)]
 - b) The initial design capacity report shall contain the following information: [§60.757(a)(2)]
 - i) A map or plot of the landfill, providing the size and location of the landfill, and identifying all areas where solid waste may be landfilled according to the permit issued by the State, local, or tribal agency responsible for regulating the landfill. [§60.757(a)(2)(i)]
 - ii) The maximum design capacity of the landfill. Where the maximum design capacity is specified in the permit issued by the state, local, or tribal agency responsible for regulating the landfill, a copy of the permit specifying the maximum design capacity may be submitted as part of the report. If the maximum design capacity of the landfill is not specified in the permit, the maximum design capacity shall be calculated using good engineering practices. The calculations shall be provided, along with the relevant parameters as part of the report. The state, tribal, local agency or Administrator may request other reasonable information as may be necessary to verify the maximum design capacity of the landfill. [§60.757(a)(2)(ii)]

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- c) An amended design capacity report shall be submitted to the Administrator 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 Administrator initially and annually thereafter, except as provided for in Paragraphs (b)(1)(ii) or (b)(3) of this section. The Administrator 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 five-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 Paragraph (a) of this section and shall be submitted no later than indicated in Paragraphs (b)(1)(i)(A) and (B) of this section. Subsequent NMOC emission rate reports shall be submitted annually thereafter, except as provided for in Paragraphs (b)(1)(ii) and (b)(3) of this section. [§60.757(b)(1)(i)]
 - (1) 90 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 Administrator is less than 50 megagrams per year in each of the next five consecutive years, the permittee may elect to submit an estimate of the NMOC emission rate for the next five -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 five years for which an NMOC emission rate is estimated. All data and calculations upon which this estimate is based shall be provided to the Administrator. This estimate shall be revised at least once every five years. If the actual waste acceptance rate exceeds the estimated waste acceptance rate in any year reported in the five-year estimate, a revised five-year estimate shall be submitted to the Administrator. The revised estimate shall cover the five-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 five-year emissions. [§60.757(b)(2)]
 - c) The permittee is exempted from the requirements of Paragraphs (b)(1) and (2) of this section, after the installation of a collection and control system in compliance with §60.752(b)(2), during such time as the collection and control system is in operation and in compliance with §§60.753 and 60.755. [§60.757(b)(3)]
 3. The permittee shall submit a closure report to the Administrator within 30 days of waste acceptance cessation. The Administrator may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 40 CFR 258.60. If a closure report has been submitted to the Administrator, no additional wastes may be placed into the landfill without filing a notification of modification as described under §60.7(a)(4). [§60.757(d)]
 4. The permittee shall submit an equipment removal report to the Administrator 30 days prior to removal or cessation of operation of the control equipment. [§60.757(e)]

- a) The equipment removal report shall contain all of the following items: [§60.757(e)(1)]
 - i) A copy of the closure report submitted in accordance with Paragraph (d) of this section; [§60.757(e)(1)(i)]
 - ii) A copy of the initial performance test report demonstrating that the 15 year minimum control period has expired; and [§60.757(e)(1)(ii)]
 - iii) Dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 50 megagrams or greater of NMOC per year. [§60.757(e)(1)(iii)]
 - b) The Administrator may request such additional information as may be necessary to verify that all of the conditions for removal in §60.752(b)(2)(v) have been met. [§60.757(e)(2)]
5. To comply with §60.752(b)(2) using an active collection system designed in accordance with §60.752(b)(2)(ii) shall submit to the Administrator annual reports of the recorded information in (f)(1) through (f)(6) of this paragraph. The initial annual report shall be submitted within 180 days of installation and start-up of the collection and control system, and shall include the initial performance test report required under §60.8. For flares, reportable exceedances are defined under §60.758(c). [§60.757(f)]
- a) Value and length of time for exceedance of applicable parameters monitored under §60.756(a) and (c). [§60.757(f)(1)]
 - b) Description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified under §60.756. [§60.757(f)(2)]
 - c) Description and duration of all periods when the control device was not operating for a period exceeding one hour and length of time the control device was not operating. [§60.757(f)(3)]
 - d) All periods when the collection system was not operating in excess of five days. [§60.757(f)(4)]
 - e) The location of each exceedance of the 500 parts per million methane concentration as provided in §60.753(d) and the concentration recorded at each location for which an exceedance was recorded in the previous month. [§60.757(f)(5)]
 - f) The date of installation and the location of each well or collection system expansion added pursuant to Paragraphs (a)(3), (b), and (c)(4) of §60.755. [§60.757(f)(6)]
6. To comply with §60.752(b)(2)(iii) shall include the following information with the initial performance test report required under §60.8: [§60.757(g)]
- a) A diagram of the collection system showing collection system positioning including all wells, horizontal collectors, surface collectors, or other gas extraction devices, including the locations of any areas excluded from collection and the proposed sites for the future collection system expansion; [§60.757(g)(1)]
 - b) The data upon which the sufficient density of wells, horizontal collectors, surface collectors, or other gas extraction devices and the gas mover equipment sizing are based; [§60.757(g)(2)]
 - c) The documentation of the presence of asbestos or nondegradable material for each area from which collection wells have been excluded based on the presence of asbestos or nondegradable material; [§60.757(g)(3)]
 - d) The sum of the gas generation flow rates for all areas from which collection wells have been excluded based on nonproductivity and the calculations of gas generation flow rate for each excluded area; and [§60.757(g)(4)]
 - e) The provisions for increasing gas mover equipment capacity with increased gas generation flow rate, if the present gas mover equipment is inadequate to move the maximum flow rate expected over the life of the landfill; and [§60.757(g)(5)]
 - f) The provisions for the control of off-site migration. [§60.757(g)(6)]

7. The permittee shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.
8. The permittee shall report any deviations from the definitions, municipal solid waste landfill standards, collection and control system standards, test methods and procedures, compliance, monitoring, active collection system specifications, record keeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 003	
10 CSR 10-6.075 Maximum Achievable Control Technology Regulations 40 CFR Part 63, Subpart AAAA – National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills ¹	
Emission Unit	Description
1	4.967 Million Cubic Meter Landfill
8	Open Flare

¹The permittee shall no longer be required to comply with the requirements of this subpart when they are no longer required to apply controls as specified in 40 CFR 60.752(b)(2)(v) of 40 CFR Part 60, Subpart WWW. [§63.1950]

Definitions:

Terms used in this subpart are defined in the Clean Air Act, 40 CFR Part 60, Subparts A and WWW and Subpart A of this part, and this section that follows: [§63.1990]

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

1. Fails to meet any requirement or obligation established by this subpart, including, but not limited to, any emissions limitation (including any operating limit) or work practice standard;
2. Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or
3. Fails to meet any emission limitation, (including any operating limit), or work practice standard in this subpart during SSM, regardless of whether or not such failure is permitted by this subpart.

Standards:

1. The permittee shall fulfill one of the requirements in Paragraph (a)(1): [§63.1955(a)]
 - a) Comply with the requirements of 40 CFR Part 60, Subpart WWW. [§63.1955(a)(1)]
2. If the permittee is required by 40 CFR 60.752(b)(2) of 40 CFR Part 60, Subpart WWW to install a collection and control system, the permittee shall comply with the requirements in §63.1960 through §63.1980 and with the general provisions of this part specified in Table 1 of this subpart. [§63.1955(b)]
3. For approval of collection and control systems that include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, record keeping or reporting provisions, the permittee shall follow the procedures in 40 CFR 60.752(b)(2). If alternatives have already been approved under 40 CFR Part 60, Subpart WWW these alternatives may be used to comply with this subpart, except that all affected sources shall comply with the SSM requirements in Subpart A of this part as specified in Table 1 of this subpart and all affected sources shall submit compliance reports every six months as specified in §63.1980(a) and (b), including information on

all deviations that occurred during the 6-month reporting period. Deviations for continuous emission monitors or numerical continuous parameter monitors shall be determined using a three hour monitoring block average. [§63.1955(c)]

Table 1 to Subpart AAAA of Part 63 — *Applicability of NESHAP General Provisions to Subpart AAAA*
 As stated in §§63.1955 and 63.1980, the permittee shall meet each requirement in the following table that applies.

Part 63 Citation	Description	Explanation
63.1(a)	Applicability: general applicability of NESHAP in this part	Affected sources are already subject to the provisions of Paragraphs (a)(10)–(12) through the same provisions under 40 CFR Part 60, Subpart A.
63.1(b)	Applicability determination for stationary sources	
63.1(e)	Title V permitting	
63.2	Definitions	
63.4	Prohibited activities and circumvention	Affected sources are already subject to the provisions of Paragraph (b) through the same provisions under 40 CFR Part 60, Subpart A.
63.5(b)	Requirements for existing, newly constructed, and reconstructed sources	
63.6(e)	Operation and maintenance requirements, startup, shutdown and malfunction plan provisions	
63.6(f)	Compliance with nonopacity emission standards	Affected sources are already subject to the provisions of Paragraphs (f)(1) and (2)(i) through the same provisions under 40 CFR Part 60, Subpart A.
63.10(b)(2)(i)–(v)	General record keeping requirements	
63.10(d)(5)	If actions taken during a startup, shutdown and malfunction plan are consistent with the procedures in the startup, shutdown and malfunction plan, this information shall be included in a semi-annual startup, shutdown and malfunction plan report. Any time an action taken during a startup, shutdown and malfunction plan is not consistent with the startup, shutdown and malfunction plan, the source shall report actions taken within 2 working days after commencing such actions, followed by a letter 7 days after the event	
63.12(a)	These provisions do not preclude the State from adopting and enforcing any standard, limitation, etc., requiring permits, or requiring emissions reductions in excess of those specified	
63.15	Availability of information and confidentiality	

Compliance:

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

Deviations:

1. A deviation is defined in §63.1990. For the purposes of the landfill monitoring and SSM plan requirements, deviations include the items in Paragraphs (b) and (c) of this section. [§63.1965]
 - a) A deviation occurs when 1 hour or more of the hours during the three-hour block averaging period does not constitute a valid hour of data. A valid hour of data shall have measured values for at least three 15-minute monitoring periods within the hour. [§63.1965(b)]
 - b) A deviation occurs when a SSM plan is not developed or maintained on site. [§63.1965(c)]

Averaging:

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

Record Keeping and Reporting:

1. Keep records and reports as specified in 40 CFR Part 60, Subpart WWW with one exception: The permittee shall submit the annual report described in 40 CFR 60.757(f) every six months. [§63.1980(a)]
2. The permittee shall also keep records and reports as specified in the general provisions of 40 CFR Part 60 and this part as shown in Table 1 of this subpart. Applicable records in the general provisions include items such as SSM plans and the SSM plan reports. [§63.1980(b)]
3. The permittee shall keep each record readily accessible to Department of Natural Resources' employees upon request. Records shall be kept in hard copy or electronic form for at least five years after the date of each occurrence, measurement, maintenance, corrective action, report, or record.
4. The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.
5. The permittee shall report any deviations from the definitions, standards, compliance, deviations, averaging, and record keeping and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 004	
10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants	
Emission Unit	Description
1	4.967 Million Cubic Meter Landfill
8	Open Flare

Emission Limitation:

1. No owner or other person shall cause or permit to be discharged into the atmosphere from any source any visible emissions with an opacity greater than 20 percent.
2. Exception: A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six (6) minutes in any sixty (60) minutes air contaminants with an opacity up to 60 percent.

Monitoring:

The permittee shall comply with the requirements of §60.18 as specified by §60.752(b)(2)(iii)(A).

Reporting:

The permittee shall report any deviations from the requirements of §60.18 in the semi-annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 005	
10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants	
Emission Unit	Description
2	Haul Road A
3	Haul Road B
4	Haul Road C

Emission Limitation:

1. No owner or other person shall cause or permit to be discharged into the atmosphere from these emission units any visible emissions with an opacity greater than 20 percent.
2. Exception: A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six (6) minutes in any sixty (60) minutes air contaminants with an opacity up to 60 percent.

Monitoring:

1. The permittee shall conduct opacity readings on the haul road using the procedures contained in U.S. EPA Test Method 22. Readings are only required when the weather conditions allow and no traffic is traversing the road. If no visible or other significant emissions are observed using these procedures, then no further observations would be required.
2. The following monitoring schedule must be maintained:
 - a) Weekly observations shall be conducted for a minimum of eight (8) consecutive weeks after permit issuance. Should no violation of this regulation be observed during this period then
 - b) Observations must be made once every two weeks for a period of eight (8) weeks. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period then
 - c) Observations must be made once per month. If a violation is noted, monitoring reverts to weekly.

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- d) If, at the issuance of this permit, the permittee has progressed in the schedule listed in a) through c) the permittee may continue to advance accordingly or maintain observations as prescribed in c).
3. If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.
 4. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then control fugitive emissions from the haul roads at this site by performing at least one of the following *Best Management Practices*:
 - a) Pavement of Road Surfaces –
 - i) The operator(s) may pave all or any portion of the haul roads with materials such as asphalt, concrete, and/or other material(s) after receiving approval from the program. The pavement will be applied in accordance with industry standards for such pavement so as to achieve “Control of Fugitive Emissions” while the plant is operating.
 - ii) Maintenance and/or repair of the road surface will be conducted as necessary to ensure that the physical integrity of the pavement is adequate to achieve control of fugitive emissions from these areas while the plant is operating.
 - iii) The operator(s) shall periodically water, wash and/or otherwise clean all of the paved portions of the haul road(s) as necessary to achieve control of fugitive emissions from these areas while the plant is operating.
 - b) Usage of Chemical Dust Suppressants –
 - i) The operator(s) shall apply a chemical dust suppressant (such as magnesium chloride, calcium chloride, lignosulfonates, etc.) to all the unpaved portions of the haul roads. The suppressant will be applied in accordance with the manufacturer’s suggested application rate (if available) and re-applied as necessary to achieve control of fugitive emissions from these areas while the plant is operating.
 - ii) The quantities of the chemical dust suppressant shall be applied, re-applied and/or maintained sufficient to achieve control of fugitive emissions from these areas while the plant is operating.
 - iii) The operator(s) shall record the time, date and the amount of material applied for each application of the chemical dust suppressant agent on the above areas. The operator(s) shall keep these records with the plant for not less than five (5) years, and the operator(s) shall make these records available to Department of Natural Resources personnel upon request.
 - c) Usage of Documented Watering –
 - i) The operator(s) shall control the fugitive emissions from all the unpaved portions of the haul roads at the installation by consistently and correctly using the application of a water spray. Documented watering will be applied in accordance with a recommended application rate of 100 gallons per day per 1,000 square feet of unpaved/untreated surface area of haul roads as necessary to achieve control of fugitive emissions from these areas while the plant is operating. For example, the operator(s) shall calculate the total square feet of unpaved vehicle activity area requiring control on any particular day, divide that product by 1,000, and multiply the quotient by 100 gallons for that day.
 - ii) The operator(s) shall maintain a log that documents daily water applications. This log shall include, but is not limited to, date and volumes (e.g., number of tanker applications and/or total gallons used) of water application. The log shall also record rationale for not applying water on day(s) the plant is in operation (e.g., meteorological situations, precipitation events, freezing, etc.)

- iii) Meteorological precipitation of any kind, (e.g. a quarter inch or more rainfall, sleet, snow, and/or freeze thaw conditions) which is sufficient in the amount or condition to achieve control of fugitive emissions from these areas while the plant is operating.
- iv) Watering may also be suspended when the ground is frozen, during periods of freezing conditions when watering would be inadvisable for traffic safety reasons, or when there will be no traffic on the roads. The operator(s) shall record a brief description of such events in the same log as the documented watering.
- v) The operator(s) shall record the date and the amount of water applied for each application on the above areas. The operator(s) shall keep these records with the plant for not less than five (5) years, and the operator(s) shall make these records available to Department of Natural Resources personnel upon request.

Record Keeping:

- 1. The permittee shall maintain records of all observation results (see Attachments D or an equivalent form generated by the permittee), noting:
 - a) Whether any air emissions (except for water vapor) were visible from the haul road and
 - b) Whether the visible emissions exceeded the opacity limit.
- 2. The permittee shall maintain records of any *Best Management Practices* performed in accordance with this permit condition.
- 3. These records shall be made available immediately for inspection to the Department of Natural Resources personnel upon request.
- 4. All records must be maintained for five (5) years.

Reporting:

- 1. The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.
- 2. The permittee shall report any deviations from the emission limitations, monitoring, record keeping, and reporting requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit.

PERMIT CONDITION 006	
10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds	
Emission Unit	Description
7	Waste Oil Space Heater

Emission Limitations:

- 1. No person shall cause or allow emissions of sulfur dioxide into the atmosphere from any indirect heating source in excess of eight pounds of sulfur dioxide per million BTUs actual heat input averaged on any consecutive three hour time period.

- No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards.

Pollutant	Concentration by Volume	Remarks
Sulfur Dioxide (SO ₂)	0.5 ppm (1300 µg/m ³)	3-hour average not to be exceeded more than once per year
	75 ppb	1-hour average; 3-year average of the 99 th percentile of the daily maximum 1-hour average at each site monitor within an area
Hydrogen Sulfide (H ₂ S)	0.05 ppm (70 µg/m ³)	½-hour average not to be exceeded over 2 times per year
	0.03 ppm (42 µg/m ³)	½-hour average not to be exceeded over 2 times in any 5 consecutive days
Sulfuric Acid (H ₂ SO ₄)	10 µg/m ³	24-hour average not to be exceeded more than once in any 90 consecutive days
	30 µg/m ³	1-hour average not to be exceeded more than once in any 2 consecutive days

Monitoring/Record Keeping

- The permittee shall retain the potential to emit calculations in Attachment F, which demonstrate that the above emission limitation will never be exceeded.
- The calculation shall be made available immediately for inspection to the Department of Natural Resources’ personnel upon request.
- All records shall be maintained for five years.

Reporting:

- The permittee shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.
- The permittee shall report any deviations from the emission limitation, operational limitation, monitoring/record keeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

IV. Core Permit Requirements

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

10 CSR 10-6.045 Open Burning Requirements

- 1) General Provisions. The open burning of tires, petroleum-based products, asbestos containing materials, and trade waste is prohibited, except as allowed below. Nothing in this rule may be construed as to allow open burning which causes or constitutes a public health hazard, nuisance, a hazard to vehicular or air traffic, nor which violates any other rule or statute.
- 2) Refer to the regulation for a complete list of allowances. The following is a listing of exceptions to the allowances:
 - a) Burning of household or domestic refuse. Burning of household or domestic refuse is limited to open burning on a residential premises having not more than four dwelling units, provided that the refuse originates on the same premises.
 - b) Yard waste.
- 3) Certain types of materials may be open burned provided an open burning permit is obtained from the Director. The permit will specify the conditions and provisions of all open burning. The permit may be revoked if the owner or operator fails to comply with the conditions or any provisions of the permit.
- 4) Lemons Sanitary Landfill may be issued an annually renewable open burning permit for open burning provided that an air curtain destructor or incinerator is utilized and only tree trunks, tree limbs, vegetation or untreated wood waste are burned. Open burning shall occur at least two hundred (200) yards from the nearest occupied structure unless the owner or operator of the occupied structure provides a written waiver of this requirement. Any waiver shall accompany the open burning permit application. The permit may be revoked if Lemons Sanitary Landfill fails to comply with the provisions or any condition of the open burning permit.
 - a) In a nonattainment area, as defined in 10 CSR 10-6.020, Paragraph (2)(N)5., the Director shall not issue a permit under this section unless the owner or operator can demonstrate to the satisfaction of the Director that the emissions from the open burning of the specified material would be less than the emissions from any other waste management or disposal method.
- 5) Reporting and Record Keeping. New Source Performance Standard (NSPS) 40 CFR Part 60 Subpart CCCC establishes certain requirements for air curtain destructors or incinerators that burn wood trade waste. These requirements are established in 40 CFR 60.2245-60.2260. The provisions of 40 CFR Part 60 Subpart CCCC promulgated as of September 22, 2005, shall apply and are hereby incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401. To comply with NSPS 40 CFR 60.2245-60.2260, sources must conduct an annual Method 9 test. A copy of the annual Method 9 test results shall be submitted to the Director.

- 6) Test Methods. The visible emissions from air pollution sources shall be evaluated as specified by 40 CFR Part 60, Appendix A–Test Methods, Method 9–Visual Determination of the Opacity of Emissions from Stationary Sources. The provisions of 40 CFR Part 60, Appendix A, Method 9 promulgated as of December 23, 1971, is incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401.

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

- 1) In the event of a malfunction, which results in excess emissions that exceed one hour, the permittee shall submit to the Director within two business days, in writing, the following information:
 - a) Name and location of installation;
 - b) Name and telephone number of person responsible for the installation;
 - c) Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered.
 - d) Identity of the equipment causing the excess emissions;
 - e) Time and duration of the period of excess emissions;
 - f) Cause of the excess emissions;
 - g) Air pollutants involved;
 - h) Best estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;
 - i) Measures taken to mitigate the extent and duration of the excess emissions; and
 - j) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.
- 2) The permittee shall submit the Paragraph 1 information list to the Director in writing at least ten days prior to any maintenance, start-up or shutdown, which is expected to cause an excessive release of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the planned occurrence, it shall be given as soon as practicable prior to the release. If an unplanned excess release of emissions exceeding one hour occurs during maintenance, start-up or shutdown, the Director shall be notified verbally as soon as practical during normal working hours and no later than the close of business of the following working day. A written notice shall follow within ten working days.
- 3) Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under Section 643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the Paragraph 1 list and shall be submitted not later than 15 days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other pertinent information available, the Director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under Section 643.080 or 643.151, RSMo.
- 4) Nothing in this rule shall be construed to limit the authority of the Director or commission to take appropriate action, under Sections 643.080, 643.090 and 643.151, RSMo to enforce the provisions of the Air Conservation Law and the corresponding rule.
- 5) Compliance with this rule does not automatically absolve the permittee of liability for the excess emissions reported.

10 CSR 10-6.060 Construction Permits Required

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

10 CSR 10-6.065 Operating Permits

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

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

- 1) The permittee shall follow the procedures and requirements of 40 CFR Part 61, Subpart M for any activities occurring at this installation, which would be subject to provisions for 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos.
- 2) The permittee shall conduct monitoring to demonstrate compliance with registration, certification, notification, and Abatement Procedures and Practices standards as specified in 40 CFR Part 61, Subpart M.

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

- 1) The permittee shall complete and submit an Emission Inventory Questionnaire (EIQ) in accordance with the requirements outlined in this rule.
- 2) The permittee may be required by the Director to file additional reports.
- 3) Public Availability of Emission Data and Process Information. Any information obtained pursuant to the rule(s) of the Missouri Air Conservation Commission that would not be entitled to confidential treatment under 10 CSR 10-6.210 shall be made available to any member of the public upon request.
- 4) The permittee shall submit a full paper EIQ to the Air Pollution Control Program by no later than April 1st after the end of each reporting year. The permittee may instead submit a full electronic EIQ via MoEIS by no later than May 1st after the end of each reporting year.
- 5) Emission fees are due by no later than June 1st after the end of each reporting year. The fees shall be payable to the Missouri Department of Natural Resources.
- 6) The reporting period shall end on December 31 of each calendar year. Each report shall contain the required information for each emission unit for the twelve (12)-month period immediately preceding the end of the reporting period.
- 7) The permittee shall collect, record and maintain the information necessary to complete the required forms during each year of operation of the installation.

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

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

10 CSR 10-6.150 Circumvention

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

10 CSR 10-6.170

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

Emission Limitation:

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

Monitoring:

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

Record Keeping:

- 1) The permittee shall document all readings on Attachment A, or its equivalent, noting the following:
 - a) Whether air emissions (except water vapor) remain visible in the ambient air beyond the property line of origin.
 - b) Whether the visible emissions were normal for the installation.
 - c) Whether equipment malfunctions contributed to an exceedance.
 - d) 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 10-6.165 Restriction of Emission of Odors

This requirement is not federally enforceable.

No person may cause, permit or allow the emission of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one volume of odorous air is diluted with seven volumes of odor-free air for two separate trials not less than 15 minutes apart within the period of one hour.

10 CSR 10-6.250 Asbestos Abatement Projects – Certification, Accreditation, and Business Exemption Requirements

The permittee shall conduct all asbestos abatement projects within the procedures established for certification and accreditation by 10 CSR 10-6.250. This rule requires individuals who work in asbestos abatement projects to be certified by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires training providers who offer training for asbestos abatement occupations to be accredited by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires persons who hold exemption status from certain requirements of this rule to allow the Department to monitor training provided to employees. Each individual who works in asbestos abatement projects must first obtain certification for the appropriate occupation from the Department. Each person who offers training for asbestos abatement occupations must first obtain accreditation from the Department. Certain business entities that meet the requirements for state-approved exemption status must allow the Department to monitor training classes provided to employees who perform asbestos abatement.

Title VI – 40 CFR Part 82 Protection of Stratospheric Ozone

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

10 CSR 10-6.280 Compliance Monitoring Usage

- 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 by a permittee:
 - 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.

V. General Permit Requirements

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

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

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

10 CSR 10-6.065(6)(C)1.C General 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's Enforcement Section, P. O. Box 176, Jefferson City, MO 65102.
 - b) The permittee shall submit a report of all required monitoring by:
 - i) October 1st for monitoring which covers the January through June time period, and
 - ii) April 1st for monitoring which covers the July through December time period.
 - iii) Exception. Monitoring requirements which require reporting more frequently than semi annually shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken.
 - c) Each report shall identify any deviations from emission limitations, monitoring, 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. Supplemental reports are required no later than ten days after any exceedance of any applicable rule, regulation or other restriction. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
 - i) Notice of any deviation resulting from an emergency (or upset) condition as defined in Paragraph (6)(C)7.A of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.

- ii) Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.
- iii) Any other deviations identified in the permit as requiring more frequent reporting than the permittee's 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)

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

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

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

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

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

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

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

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

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

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

None.

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

- 1) Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official.
- 2) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the Missouri Department of Natural Resources, or their authorized agents, to perform the following (subject to the installation's right to seek confidential treatment of information submitted to, or obtained by, the Air Pollution Control Program):
 - a) Enter upon the premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
 - b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c) Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 - d) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.
- 3) All progress reports required under an applicable schedule of compliance shall be submitted 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, 901 North 5th Street, Kansas City, KS 66101, as well as the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and Part 64 exceedances and excursions must be included in the compliance certifications. The compliance certification shall include the following:
 - a) The identification of each term or condition of the permit that is the basis of the certification;
 - b) The current compliance status, as shown by monitoring data and other information reasonably available to the installation;

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

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

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

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

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

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

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

under the permit, and the changes do not result in the emission of any air contaminant not previously emitted. The permittee shall notify the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, KS 66101, 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's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, KS 66101, describing the changes to be made, the date on which the change will occur, and any changes in emission and any permit terms and conditions that are affected. The permittee shall maintain a copy of the notice with the permit, and the Air Pollution Control Program shall place a copy with the permit in the public file. Written notice shall be provided to the EPA and the Air Pollution Control Program as above at least seven days before the change is to be made. If less than seven days notice is provided because of a need to respond more quickly to these unanticipated conditions, the permittee shall provide notice to the EPA and the Air Pollution Control Program as soon as possible after learning of the need to make the change.
 - b) The permit shield shall not apply to these changes.

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

- 1) Except as noted below, the permittee may make any change in its permitted operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Insignificant activities listed in the application, but not otherwise addressed in or prohibited by this permit, shall not be considered to be constrained by this permit for purposes of the off-permit provisions of this section. Off-permit changes shall be subject to the following requirements and restrictions:
 - a) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; the permittee may not change a permitted installation without a permit revision if this change is subject to any requirements under Title IV of the Act or is a Title I modification;
 - b) The permittee must provide written notice of the change to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, KS 66101, no later than the next annual emissions report. This notice shall not be required for changes that are insignificant activities under 10 CSR 10-6.065(6)(B)3. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change.
 - c) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes; and

- d) The permit shield shall not apply to these changes.

10 CSR 10-6.020(2)(R)12 Responsible Official

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

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

This permit may be reopened for cause if:

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

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

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

VI. Attachments

Attachments follow.

Attachment C
 10 CSR 10-3.060 Compliance Demonstration

This attachment may be used to demonstrate that the listed emission units are in compliance with 10 CSR 10-3.060, *Restriction of Emission of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating*. Installation's Total Heat Input (Q) in MMBtu/hr:

Emission Unit	Description	MHDR (MMBtu/hr)
7	Waste Oil Space Heater	1.95
9	Propane Heater	0.396
Total Q		2.346

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

Emission Unit	Description	Emission Factor	Emission Factor (lb/MMBtu)	Emission Limit (lb/MMBtu)	Is the Emission unit in compliance?
7	Waste Oil Space Heater	2.8A lb/1000 gallons	0.60	0.60	YES
9	Propane Heater	0.976 lb/1000 gallons	0.01	0.60	YES

The Waste Oil Space Heater emission factor was estimated using AP-42 Table 1.11-1, which provides a PM emission factor of 2.8A (where A is % Ash Content). The installation may combust waste oil with up to 30 percent ash and a heating value of 140 MMBtu/1000 gallons without exceeding the emission limit. The Propane Heater emission factor was taken from FIRE for SCC 10500210, a heating value of 90,500 Btu/gallon was assumed. The facility employs no control devices on these emission units. The calculations show that no further monitoring or record keeping is necessary because the emission units worst-case emissions are substantially lower than the applicable limit.

Attachment E
 Method 9 Opacity Observations

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

Readings ranged from _____ to _____ % opacity.

Was the emission unit in compliance at the time of evaluation?

YES
 NO

 Signature of Observer

ATTACHMENT F
10 CSR 10-6.260 Compliance Demonstration

This attachment may be used to demonstrate that the listed emission unit is in compliance with 10 CSR 10-6.260, *Restriction of Emission of Sulfur Compounds*.

The allowable SO_x emission limitation for indirect heating sources is 8 lb/MMBtu.

Emission Unit	Description	Fuel	Emission Factor	Emission Factor (lb/MMBtu)	Emission Limit (lb/MMBtu)	Is the Emission Unit in compliance?
7	Space Heater	Waste Oil	1120 lb/1000 gallons	8	8	Yes

The emission factor of 100S lbs/1000 gallons was taken from AP-42 Table 1.11-2, where S is the weight % of sulfur in the oil. The installation can burn waste oil with a sulfur content of up to 11.2 percent without exceeding the emission limit. The heat content of the waste oil was evaluated to be 140 MMBtu/1000 gallons based upon the default heating value given within AP-42 Section 1.11.3. The calculations show that no further monitoring or record keeping is necessary because the emission units worst-case emissions are substantially lower than the applicable limit. The emission unit meets the emission limitation without the aid of a control device; therefore, CAM is not applicable.

STATEMENT OF BASIS

Permit Reference Documents

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

- 1) Part 70 Operating Permit Application, received June 28, 2010
- 2) 2009 Emissions Inventory Questionnaire
- 3) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition
- 4) No Construction Permit Required Letter, Issued January 28, 1999
- 5) Construction Permit No. 052001-016, Issued May 1, 2001

Other Air Regulations Determined Not to Apply to the Operating Permit

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

10 CSR 10-6.100 *Alternate Emission Limits* is not applicable to the installation and has not been applied within this permit. The installation is located in an ozone attainment area.

10 CSR 10-6.400 *Restriction of Emission of Particulate Matter From Industrial Processes* is not applicable to the installation and has not been applied within this permit. Emission Unit 8 Open Flare is not subject to this regulation as the definition of process weight within 10 CSR 10-6.400(2)(A) excludes liquids and gases introduced for the purposes of combustion. The following emission units are exempted under 10 CSR 10-6.400(1)(B)6 as they are indirect heating sources:

Emission Unit	Description
7	Waste Oil Space Heater
9	Propane Heater

The following emission units are exempted under 10 CSR 10-6.400(1)(B)7 as they are fugitive emission sources:

Emission Unit	Description
1	Landfill
2	Haul Road A
3	Haul Road B
4	Haul Road C
8	Open Flare

Construction Permits

No Construction Permit Required Letter, Issued January 28, 1999:

- This no construction permit required letter is for the installation of a 4-inch, 300 cubic feet per minute passive flare to burn landfill gas.
- This flare is no longer located at the installation.

Construction Permit No. 052001-016, Issued May 1, 2001:

- This construction permit is for the installation of an active skid mounted utility flare. This 2,000 scf/min flare has been included within this operating permit as Emission Unit 8 Open Flare.
- Special Condition No. 1 requires the permittee to comply with Missouri's odor rule previously listed as 10 CSR 10-3.090, 10 CSR 10-2.070, 10 CSR 10-3.090, and 10 CSR 10-4.070 were rescinded and have been replaced by the statewide odor regulation 10 CSR 10-6.165. 10 CSR 10-6.165 has been applied within Section IV *Core Permit Requirements* of this permit.

New Source Performance Standards (NSPS) Applicability

40 CFR Part 60, Subpart Cc – *Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills* is not applicable to the installation and has not been applied within this permit. The installation has increased their design capacity since May 30, 1991 and; therefore, does not qualify as a designated facility under §60.32c(a).

40 CFR Part 60, Subparts D, Da, Db, and Dc – *Standards of Performance for Steam Generating Units* is not applicable to the installation and has not been applied within this permit. These regulations are applicable to steam generating units with maximum hourly design rates of 10 MMBtu/hr or greater.

40 CFR Part 60, Subparts K, Ka, and Kb – *Standards of Performance for Storage Vessels* is not applicable to the installation and has not been applied within this permit. These regulations are applicable to storage vessels with a capacity of 75 m³ (19,812 gallons) or more. The installation's largest storage vessels, Emission Units 5 and 6 – Tanks 1 and 2 Diesel Fuel Storage, have a capacity of 10,000 gallons each.

40 CFR Part 60, Subpart WWW – *Standards of Performance for Municipal Solid Waste Landfills* is applicable to the installation and has been applied within this permit (see Permit Condition 002). The provisions of this subpart apply to each municipal solid waste landfill that commenced construction, reconstruction or modification on or after May 30, 1991. [§60.750(a)]

Maximum Achievable Control Technology (MACT) Applicability

40 CFR Part 63, Subpart AAAA – *National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills* is applicable to the installation and has been applied within this permit (see Permit Condition 003). The provisions of this subpart apply to municipal solid waste landfills that are area sources of hazardous air pollutants with a design capacity equal to or greater than 2.5 million cubic meters, that have accepted waste since November 8, 1987, and that have an uncontrolled potential to emit equal to or greater than 50 megagrams per year of NMOC. [§63.1935(a)]

National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability

None.

Compliance Assurance Monitoring (CAM) Applicability

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

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

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

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

Other Regulatory Determinations

10 CSR 10-6.220 *Restriction of Emission of Visible Air Contaminants* is applicable to the installation and has been applied within this permit (see Permit Conditions 004 and 005).

- Monitoring of the haul road is only necessary when there are not vehicles traveling upon it. Opacity due to vehicles traveling should be covered by the 6 minute opacity exception. Monitoring is required when there are no vehicles traveling upon the road to ensure that there are not fugitive emissions from the haul road due to windy conditions.
- The regulation is applicable to the following emission units, but was not applied within the permit as the emission units have potential visible emissions of less than 0.5 lbs/hr and are assumed to always be in compliance with this regulation:

Emission Unit	Description
7	Waste Oil Space Heater
9	Propane Heater

10 CSR 10-6.260 *Restriction of Emission of Sulfur Compounds* is applicable to the installation and has been applied within this permit (see Permit Condition 006). The regulation is not applicable to Emission Unit 9 Propane Heater as combustion equipment using exclusively pipeline grade natural gas or liquefied petroleum gas is exempted under 10 CSR 10-6.260(1)(A)2. The regulation is applicable to Emission Unit 8 Open Flare; however, AP-42 Section 2.4.4.2 lists a default sulfur compound concentration of 46.9 ppmv for landfill gas which is below the emission limitation of 500 ppmv within 10 CSR 10-6.260(3)(A)2.

An updated Potential to Emit for the installation is shown in the table below:

Pollutant	Potential to Emit (tons/yr) ¹
CO	197.24
CO _{2e}	40,761.17
PM ₁₀	26.18
PM ₂₅	6.76
VOC	22.19
NMOC	9.85
NO _x	11.42
SO _x	9.38
HAP	7.75
Toluene (108-88-3)	2.58
Dichloromethane (75-09-2)	0.87
Hydrochloric acid (7647-01-0)	0.78
Benzene (71-43-2)	0.62
Perchloroethylene (127-18-4)	0.44
Hexane (110-54-3)	0.40
Ethyl benzene (100-41-4)	0.35
Vinyl chloride (75-01-4)	0.33
Trichloroethylene (79-01-6)	0.26
Acrylonitrile (107-13-1)	0.24
1,1-Dichloroethane (75-34-3)	0.17
Methyl isobutyl ketone (108-10-1)	0.13
1,1,2,2-Tetrachloroethane (79-34-5)	0.13
Chloroethane (75-00-3)	0.06
1,1,1-Trichloroethane (71-55-6)	0.05
Chloromethane (74-87-3)	0.04
Carbon disulfide (75-15-0)	0.03
1,2-Dichloroethane (107-06-2)	0.03
Dichlorobenzene (106-46-7)	0.02
Carbonyl sulfide (463-58-1)	0.02
Chlorobenzene (108-90-7)	0.02
Chromium Compounds (20-06-4)	0.01
1,2-Dichloropropane (78-87-5)	0.01
1,1-Dichloroethylene (75-35-4)	0.01

¹Potential emissions are based upon 8,760 annual hours of uncontrolled operation unless otherwise noted:

- Emission Units 2, 3, and 4 Haul Roads were given 50% control of PM emissions from undocumented watering.
- Emission Unit 1 Landfill was given a 75% control/capture efficiency for HAPs, NMOC, and VOC due to the routing of landfill gas to Emission 8 Open Flare.
- Emission 8 Open Flare was given a 56.5% control efficiency for HAPs, a 98% control efficiency for VOC, and a 99.2% control efficiency for NMOC due to combustion/destruction of these constituents within the landfill gas routed to the flare.

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

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

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

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

Prepared by:

Alana L. Rugen
Environmental Engineer

CERTIFIED MAIL: 70082810000020167473
RETURN RECEIPT REQUESTED

Mr. Tim Trost
Lemons Sanitary Landfill
15250 Old Bloomfield Drive
Dexter, MO 63841

Re: Lemons Sanitary Landfill, 207-0062
Permit Number: **OP2011-025**

Dear Mr. Trost:

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

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

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

Sincerely,

AIR POLLUTION CONTROL PROGRAM

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

MJS:ark

Enclosures

c: Southeast Regional Office
PAMS File: 2010-06-075