City of Jacksonville
Trail Ridge Landfill

Facility ID No. 0310358
Duval County

Title V Air Operation Permit Renewal

Permit No. 0310358-020-AV
(Renewal of Title V Air Operation Permit No. 0310358-016-AV)

Permitting Authority:

State of Florida
Northeast District Office
Permitting Authority
8800 Baymeadows Way West, Suite 100
Jacksonville, Florida 32256

Telephone: (904) 256-1700
Email: DEP_NED@FloridaDEP.gov

Compliance Authority:

Northeast District Office
Compliance Authority
8800 Baymeadows Way West, Suite 100
Jacksonville, Florida 32256
Telephone: (904) 256-1700
Email: DEP_NED@FloridaDEP.gov

Title V Air Operation Permit Renewal

Permit No. 0310358-020-AV

Table of Contents

FLORIDA DEPARTMENT OF Environmental Protection

Ron DeSantis
Governor

Alexis A. Lambert
Secretary

Northeast District
8800 Baymeadows Way West, Suite 100
Jacksonville, Florida 32256

PERMITTEE:
City of Jacksonville
117 West Duval Street
Jacksonville, Florida 32202

Permit No. 0310358-020-AV
Trail Ridge Landfill
Facility ID No. 0310358
Title V Air Operation Permit Renewal

The purpose of this permit is to renew the Title V air operation permit for the above referenced facility. The existing Trail Ridge Landfill is located in Duval County at 5110 US Highway 301, Jacksonville, Florida. UTM Coordinates are: Zone 17, 400.26 East and 3344.42 North. Latitude is: 30° 13' 37.954" North; and, Longitude is: 82° 02' 11.4516" West.

The Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210 and 62-213. The above named permittee is hereby authorized to operate the facility in accordance with the terms and conditions of this permit.

0310358-020-AV Effective Date:	DATE, 20xx
Renewal Application Due Date:	Exp. DATE -225, 20zz
Expiration Date:	Eff. DATE + 5 years, 20zz

(Proposed)

Katie Sula Miller
Permitting Program Administrator

KSM/rfs

Subsection A. Facility Description.

The Trail Ridge Landfill is located at 5110 U. S. Highway 301 South, Baldwin, Duval County, Florida. It is a Class I municipal solid waste (MSW) landfill owned by the City of Jacksonville and operated by Waste Management, Inc.

The landfill currently consists of 176 acres which commenced construction in 1992. It receives approximately 2,500 to 3,000 tons of waste daily; has a total site area of 977 acres of land; and, currently has a 427 acre "footprint". The landfill serves both residential and commercial customers.

Landfill gas produced from the decomposition of disposed waste is collected from both active and capped cells by an active gas recovery system at the landfill. The collected gas is either transferred to Trail Ridge Energy, LLC, Trail Ridge Energy Facility where it is treated and used as fuel to power six internal combustion engines to produce electricity; or it is combusted by Trail Ridge Landfill in a 5,000 scfm open flare.

The facility also has two Cummins diesel powered emergency generators.

The emissions from City of Jacksonville Trail Ridge Landfill and Trail Ridge Energy, LLC, Trail Ridge Energy Facility (AIRS ID 0310654) are to be aggregated for PSD and Title V determinations.

Subsection B. Summary of Emissions Units.

EU No.	Brief Description
Regulated Emissions Units	
001	Municipal Solid Waste Landfill
010	5,000 SCFM Open, Non-assisted Utility Flare
016	Emergency Diesel Generator (Scalehouse)
017	Emergency Diesel Generator (Shop)

Also included in this permit are miscellaneous insignificant emissions units and/or activities (see Appendix I, List of Insignificant Emissions Units and/or Activities).

Subsection C. Applicable Regulations.

Based on the Title V air operation permit renewal application received April 10, 2024, this facility is a major source of hazardous air pollutants (HAP). The existing facility is a prevention of significant deterioration (PSD) major source of air pollutants in accordance with Rule 62-212.400, F.A.C. A summary of applicable regulations is shown in the following table.

Regulation	EU No(s).
Federal Rule Citations	
40 CFR 60, Subpart A, NSPS General Provisions	001, 010
40 CFR 60, Subpart XXX – Standards of Performance for Municipal Solid Waste Landfills That Commenced Construction, Reconstruction, or Modification After July 17, 2014	001, 010
40 CFR 61, Subpart A – General Provisions – NESHAP	001
40 CFR 61, Subpart M (Set A) – NESHAP for Asbestos	001
40 CFR 63, Subpart A – General Provisions.	001, 010, 016, 017
40 CFR 63, Subpart AAAA – National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills.	001, 010
40 CFR 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air	016, 017

Pollutants for Stationary Reciprocating Internal Combustion Engines	
State Rule Citations	
Rule 62-4, Florida Administrative Code (F.A.C.) (Permitting Requirements)	001, 010, 016, 017
Rule 62-204, F.A.C. (Ambient Air Quality Requirements, PSD Increments, and Federal Regulations Adopted by Reference)	001, 010, 016, 017
Rule 62-210, F.A.C. (Permits Required, Public Notice, Reports, Stack Height Policy, Circumvention, Excess Emissions, and Forms)	001, 010, 016, 017
Rule 62-213, F.A.C. (Title V Air Operation Permits for Major Sources of Air Pollution)	001, 010, 016, 017
Rule 62-297, F.A.C. (Test Methods and Procedures, Continuous Monitoring Specifications, and Alternate Sampling Procedures)	001, 010, 016, 017
Local Rule Citations	
City of Jacksonville Ordinance Code, Title X, Chapter 360 [Environmental Regulation], Chapter 362 [Air and Water Pollution], Chapter 376 [Odor Control], Jacksonville Environmental Protection Board (JEPB) Rule 1 [Final Rules with Respect to Organization, Procedure, and Practice]; JEPB Rule 2, Parts I through VII, and Parts IX through XIV	001, 010, 016, 017

The following conditions apply facility-wide to all emission units and activities:

FW1. Appendices. The permittee shall comply with all documents identified in Section IV, Appendices, listed in the Table of Contents. Each document is an enforceable part of this permit unless otherwise indicated. [Rule 62-213.440, F.A.C.; and Rule 2.501, JEPB]

Emissions and Controls

FW2. Not federally Enforceable. Objectionable Odor Prohibited. No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rule 62-296.320(2) and 62-210.200(Definitions), F.A.C.; and Rules 2.1101 and 2.301, JEPB]

FW3. Odor Remediation Plan. The facility shall be operated to control objectionable odors in accordance with subsection 62-296.320(2), F.A.C. After being notified by the Department that objectionable odors have been confirmed beyond the landfill property boundary, the owner or operator shall:

a. Immediately take steps to reduce the objectionable odors. Such steps may include applying or increasing initial cover, reducing the size of the working face, and ceasing operations in the areas where odors have been detected;
b. Submit to the Department for approval an odor remediation plan for the gas releases. The plan shall describe the nature and extent of the problem and the proposed long-term remedy. The remedy shall be initiated within 30 days of approval.
c. Implement a routine odor monitoring program to determine the timing and extent of any off-site odors, and to evaluate the effectiveness of the odor remediation plan.

[Rule 62-701.530(3)(b), F.A.C.]

FW4. General Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed-necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.; and Rule 2.1101, JEPB]

{Permitting Note: Nothing is deemed necessary and ordered at this time.}

FW5. General Visible Emissions. No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b), F.A.C. and Rule 2.1101, JEPB]

FW6. Unconfined Particulate Matter. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction; alteration; demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

a. Work areas are kept small to minimize the amount of exposed area.
b. Water is sprayed on unpaved roadways to reduce emissions of unconfined particulate matter.
c. Speed of traffic is minimized on unpaved roads through the use of posted speed limits and enforcement.

[Rule 62-296.320(4)(c), F.A.C.; Rule 2.1101, JEPB and, proposed by applicant in Title V air operation permit renewal application received April 10, 2024]

Reports and Fees

See Appendix RR, Facility-wide Reporting Requirements for additional details.

FW7. Electronic Annual Operating Report and Title V Annual Emissions Fees. The information required by the Annual Operating Report for Air Pollutant Emitting Facility [Including Title V Source Emissions Fee Calculation] (DEP Form No. 62-210.900(5)) shall be submitted by April 1 of each year, for the previous calendar year, to the Department of Environmental Protection's (DEP) Division of Air Resource Management. Each Title V source shall submit the annual operating report using the DEP's Electronic Annual Operating Report (EAOR) software, unless the Title V source claims a technical or financial hardship by submitting DEP Form No. 62-210.900(5) to the DEP Division of Air Resource Management instead of using the reporting software. Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C. Each Title V source must pay between January 15 and April 1 of each year an annual emissions fee in an amount determined as set forth in subsection 62-213.205(1), F.A.C. The annual fee shall only apply to those regulated pollutants, except carbon monoxide and greenhouse gases, for which an allowable numeric emission-limiting standard is specified in the source's most recent construction permit or operation permit. Upon completing the required EAOR entries, the EAOR Title V Fee Invoice can be printed by the source showing which of the reported emissions are subject to the fee and the total Title V Annual Emissions Fee that is due. The submission of the annual Title V emissions fee payment is also due (postmarked) by April 1st of each year. A copy of the system-generated EAOR Title V Annual Emissions Fee Invoice and the indicated total fee shall be submitted to: **Major Air Pollution Source Annual Emissions Fee, Post Office Box 3070, Tallahassee, Florida 32315-3070.** Additional information is available by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: https://floridadep.gov/air/permitting-compliance/content/title-v-fees. [Rules 62-210.370(3), 62-210.900 & 62-213.205, F.A.C.; Rule 2.301, JEPB, Rule 2.501, JEPB; and, §403.0872(11), Florida Statutes (2013)]

{Permitting Note: Resources to help you complete your AOR are available on the electronic AOR (EAOR) website at: https://floridadep.gov/air/permitting-compliance/content/annual-operating-report. If you have questions or need assistance after reviewing the information posted on the EAOR website, please contact the Department by phone at (850) 717-9000 or email at eaor@dep.state.fl.us.}

{Permitting Note: The Title V Annual Emissions Fee form (DEP Form No. 62-213.900(1)) has been repealed. ***A separate Annual Emissions Fee form is no longer required to be submitted by March 1st each year.****}*

FW8. Annual Statement of Compliance. The permittee shall submit an annual statement of compliance to the compliance authority at the address shown on the cover of this permit and to the U.S. EPA at the address shown below within 60 days after the end of each calendar year during which the Title V air operation permit was effective (See also Appendix RR, Conditions RR1 and RR7). The annual statement of compliance can be submitted to the U.S. EPA via the Compliance and Emissions Data Reporting Interface (CEDRI) on EPA's Central Data Exchange (CDX) at https://cdx.epa.gov/. [Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C.; Rule 2.501, JEPB]

U.S. Environmental Protection Agency, Region 4
Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303
Attn: Air Enforcement Branch

FW9. Prevention of Accidental Releases (Section 112(r) of CAA). If, and when, the facility becomes subject to 112(r), the permittee shall:

a. Submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent electronically through EPA's Central Data Exchange system at the following address: https://cdx.epa.gov. Information on electronically submitting risk management plans using the Central Data Exchange system is available at: https://www.epa.gov/rmp. The RMP Reporting Center can be contacted at: RMP Reporting Center, Post Office Box 10162, Fairfax, VA 22038, Telephone: (703) 227-7650.

b. Submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.

[40 CFR 68]

FW9. Semi-Annual Reports. The permittee shall monitor compliance with the terms and conditions of this permit and shall submit reports at least every six months to the compliance office. Each semi-annual report shall cover the 6-month periods of January 1 – June 30 and July 1 – December 31. The reports shall be submitted by the 60th day following the end of each calendar half (i.e., March 1st and August 29th of every year). All instances of deviations from permit requirements (including conditions in the referenced Appendices) shall be clearly identified in such reports, including reference to the specific requirement and the duration of such deviation. If there are no deviations during the reporting period, the report shall so indicate. Any semi-annual reporting requirements contained in applicable federal NSPS or NESHAP requirements may be submitted as part of this report. The submittal dates specified above shall replace the submittal dates specified in the federal rules. All additional reports submitted as part of this report should be clearly identified according to the specific federal requirement. All reports shall include a certification by a responsible official, pursuant to subsection 62-213.420(4), F.A.C. (See also Conditions RR2. – RR4. of Appendix RR, Facility-wide Reporting Requirements, for additional reporting requirements related to deviations.) [Rule 62-213.440(1)(b)3.a., F.A.C.; Rule 2.501, JEPB and, 40 CFR 60.19(d), 40 CFR 61.10(h) & 40 CFR 63.10(a)(5)]

{Permitting Note: EPA has clarified that, pursuant to 40 CFR 70.6(a)(3), the word "monitoring" is used in a broad sense and means monitoring (i.e., paying attention to) the compliance of the source with all emissions limitations, standards, and work practices specified in the permit.}

The following Facility-wide conditions are not federally enforceable:

FW10. City of Jacksonville Ordinance Code. The facility shall be subject to the City of Jacksonville Ordinance Code, Title X, Chapter 360 [Environmental Regulation], Chapter 362 [Air and Water Pollution], Chapter 376 [Odor Control], and JEPB Rule 1 [Final Rules with Respect to Organization, Procedure, and Practice].

FW11. JEPB. The facility shall be subject to JEPB Rule 2, Parts I through VII, and Parts IX through XIV.

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
001	Municipal Solid Waste Landfill

The landfill currently consists of 427 acres which commenced construction in 1992. It receives approximately 2,500 to 3,000 tons of waste daily; has a total site area of 977 acres of land; and, currently has a 427 acre "footprint". The most recent landfill design capacity increase, for new Phases 6-14 to be constructed, was approved on June 16, 2014. The Solid Waste Permit that was issued (No. 0013493-026-SC-01) stated that the permitted site-wide total disposal area is 427 acres. This permitted total sitewide capacity includes all of the landfill phases (up to Phase 14). The landfill serves both residential and commercial customers.

Trail Ridge Landfill became subject to 40 CFR 60, NSPS Subpart XXX, since it modified the landfill after July 17, 2014, when it began construction on the first cell of the new expansion on May 18, 2015.

The Municipal Solid Waste Landfill includes a Landfill Gas Collection System which consists of a series of vertical and/or horizontal collection piping; a blower system that includes two 2,500 scfm centrifugal exhauster type LFG blowers designed at a minimum of -60" water column (wc) inlet suction and 10" wc discharge pressure; and gas extraction wells. The extracted landfill gas is routed through lateral piping to a header pipe which runs along the outer edge of the landfill. Two blowers pulls the extracted gas through the header pipe to a gas treatment system for subsequent use as fuel to power the Trail Ridge Energy, LLC, Trail Ridge Energy Facility internal combustion (IC) engines (EU 001 through 006) and/or the City of Jacksonville Trail Ridge Landfill 5,000 standard cubic feet per minute (scfm) open flare for destruction by combustion.

The primary mode of operation is the fueling of the internal combustion engines at the Trail Ridge Energy LLC, Trail Ridge Energy Facility (AIRS ID 0310654). Any excess landfill gas that exceeds the volume the Trail Ridge Energy LLC, Trail Ridge Energy Facility is able to accept is to be diverted to the 5,000 scfm open flare for control.

{Permitting Note: This emission unit is regulated pursuant to 40 CFR 60, Subpart A - General Provisions, adopted and incorporated by reference in Rule 62-204.800(8)(d), F.A.C.; Subpart XXX, Standards of Performance for Municipal Solid Waste Landfills That Commenced Construction, Reconstruction, or Modification After July 17, 2014, adopted and incorporated by reference in Rule 62-204.800(8)(b)77, F.A.C. This emission unit also is regulated pursuant to 40 CFR 63, Subpart A, adopted and incorporated by reference in Rule 62-204.800(11)(d)1.,F.A.C, NESHAP 40 CFR 63, Subpart AAAA, National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills adopted and incorporated by reference in Rule 62-204.800(11)(b)59., F.A.C. and 40 CFR 61, National Emission Standard for Hazardous Air Pollutants (NESHAP) Subpart M National Emissions Standards for Asbestos, adopted and incorporated by reference in Rule 62-204.800(10)(b)8., F.A.C. as applicable for asbestos disposal.}

Essential Potential to Emit (PTE) Parameters

A.1. Hours of Operation. This emissions unit may operate continuously without restriction. [Rule 62-210.200(PTE), F.A.C.; and Rule 2.301, JEPB]

A.2. Operational Standards for Active Asbestos Waste Disposal. Because this facility receives asbestos-containing waste material from: asbestos mills; manufacturing, fabricating, demolition, renovation, and spraying operations; and operations that convert asbestos-containing waste material into non-asbestos (asbestos-free) material, the permittee shall meet the following requirements:

a. Either there shall be no visible emissions to the outside air from any active waste disposal site where asbestos-containing waste material has been deposited, or the requirements of **paragraph c. or d.** of this condition shall be met.

b. Unless a natural barrier adequately deters access by the general public, either warning signs and fencing shall be installed and maintained as follows, or the requirements of **paragraph c(1)** of this condition shall be met.
   (1) Warning signs shall be displayed at all entrances and at intervals of 100 m (330 ft) or less along the property line of the site or along the perimeter of the sections of the site where asbestos-containing waste material is deposited. The warning signs shall:
      (a) Be posted in such a manner and location that a person can easily read the legend; and
      (b) Conform to the requirements of 51 cm × 36 cm (20 inch×14 inch) upright format signs specified in 29 CFR 1910.145(d)(4) and this paragraph; and
      [Note: 29 CFR 1910.145(d)(4) *Caution signs*. The standard color of the background shall be yellow; and the panel, black with yellow letters. Any letters used against the yellow background shall be black. The colors shall be those of opaque glossy samples as specified in Table 1 of ANSI Z53.1-1967 or Table 1 of ANSI Z535.1-2006(R2011), incorporated by reference in 29 CFR 1910.6.]
      (c) Display the following legend in the lower panel with letter sizes and styles of a visibility at least equal to those specified in this paragraph.

Legend	Notation
Asbestos Waste Disposal Site	2.5 cm (1 inch) Sans Serif, Gothic or Block.
Do Not Create Dust	1.9 cm (3/4 inch) Sans Serif, Gothic or Block.
Breathing Asbestos is Hazardous to Your Health	14 Point Gothic.

      Spacing between any two lines shall be at least equal to the height of the upper of the two lines.
   (2) The perimeter of the disposal site shall be fenced in a manner adequate to deter access by the general public.
   (3) Upon request and supply of appropriate information, the Department will determine whether a fence or a natural barrier adequately deters access by the general public.

c. Rather than meet the no visible emission requirement of **paragraph a**. of this condition, at the end of each operating day, or at least once every 24-hour period while the site is in continuous operation, the asbestos-containing waste material that has been deposited at the site during the operating day or previous 24-hour period shall:
   (1) Be covered with at least 15 centimeters (6 inches) of compacted non-asbestos-containing material, or
   (2) Be covered with a resinous or petroleum-based dust suppression agent that effectively binds dust and controls wind erosion. Such an agent shall be used in the manner and frequency recommended for the particular dust by the dust suppression agent manufacturer to achieve and maintain dust control. Other equally effective dust suppression agents may be used upon prior approval by the Department. For purposes of this paragraph, any used, spent, or other waste oil is not considered a dust suppression agent.

d. Rather than meet the no visible emission requirement of **paragraph a.** of this condition, use an alternative emissions control method that has received prior written approval by the Department. As prescribed by 40 CFR 61.149(c)(2), to obtain approval for an alternative method, a written application shall be submitted to the Department demonstrating that the following criteria are met:
   (1) The alternative method will control asbestos emissions equivalent to currently required methods.
   (2) The suitability of the alternative method for the intended application.
   (3) The alternative method will not violate other regulations.
   (4) The alternative method will not result in increased water pollution, land pollution, or occupational hazards.

e. For all asbestos-containing waste material received, the owner or operator shall:

(1) Maintain waste shipment records, using a form similar to that shown in Figure 4 of 40 CFR 61.149], and include the following information:
  (a) The name, address, and telephone number of the waste generator.
  (b) The name, address, and telephone number of the transporter(s).
  (c) The quantity of the asbestos-containing waste material in cubic meters (cubic yards).
  (d) The presence of improperly enclosed or uncovered waste, or any asbestos-containing waste material not sealed in leak-tight containers. Report in writing to the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator (identified in the waste shipment record), and, if different, the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the disposal site, by the following working day, the presence of a significant amount of improperly enclosed or uncovered waste. Submit a copy of the waste shipment record along with the report.
  (e) The date of the receipt.

(2) As soon as possible and no longer than 30 days after receipt of the waste, send a copy of the signed waste shipment record to the waste generator.

(3) Upon discovering a discrepancy between the quantity of waste designated on the waste shipment records and the quantity actually received, attempt to reconcile the discrepancy with the waste generator. If the discrepancy is not resolved within 15 days after receiving the waste, immediately report in writing to the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator (identified in the waste shipment record), and, if different, the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the disposal site. Describe the discrepancy and attempts to reconcile it, and submit a copy of the waste shipment record along with the report.

(4) Retain a copy of all records and reports required by this paragraph for at least five years.

f. Maintain, until closure, records of the location, depth and area, and quantity in cubic meters (cubic yards) of asbestos-containing waste material within the disposal site on a map or diagram of the disposal area.

g. Upon closure, comply with all the provisions of 40 CFR 61.151.

h. Submit to the Department, upon closure of the facility, a copy of records of asbestos waste disposal locations and quantities.

i. Furnish upon request, and make available during normal business hours for inspection by the Department, all records required under this permit.

j. Notify the Department in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at a waste disposal site and is covered. If the excavation will begin on a date other than the one contained in the original notice, notice of the new start date shall be provided to the Department at least ten working days before excavation begins and in no event shall excavation begin earlier than the date specified in the original notification. Include the following information in the notice:
  (1) Scheduled starting and completion dates.
  (2) Reason for disturbing the waste.
  (3) Procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material. If deemed necessary, the Department may require changes in the emission control procedures to be used.
  (4) Location of any temporary storage site and the final disposal site.

[Rule 62-204.800(10), F.A.C.; Rule 2.201, JEPB; 29 CFR 1910.145(d)(4), 40 CFR 61.149(c)(2), and 40 CFR 61.154]

40 CFR 63, Subpart AAAA

A.3. Subject to 40 CFR 63, Subpart AAAA. The permittee is subject to 40 CFR 63, Subpart AAAA because they own and operate a MSW landfill that has accepted waste since November 8, 1987, has additional capacity for waste deposition, and the landfill is a major source of HAPS as defined by 40 CFR 63.2 of Subpart A. [Rule 62-204.800(11), F.A.C; Rule 2.201, JEPB; and, 40 CFR 63.1935(a)(1)]

A.4. Affected Source of 40 CFR 63, Subpart AAAA.

a. An affected source of 40 CFR 63, Subpart AAAA is a MSW landfill, as defined in 40 CFR 63.1990 (Definitions), that meets the criteria in **Specific Condition No. A.3 above** (40 CFR 63.1935). The affected source includes the entire disposal facility in a contiguous geographic space where household waste is placed in or on land, including any portion of the MSW landfill operated as a bioreactor.

b. A new affected source of 40 CFR 63, Subpart AAAA is an affected source that commenced construction or reconstruction after November 7, 2000. An affected source is reconstructed if it meets the definition of reconstruction in 40 CFR 63.2 of subpart A.

c. An affected source of 40 CFR 63, Subpart AAAA is exiting if it is not new.

[Rule 62-204.800(11), F.A.C.; Rule 2.201, JEPB; and 40 CFR 63.1940]

{Permitting Note: This condition is only to clarify the applicability of rules and, by itself, requires no specific action for the permittee to comply with.}

A.5. No Longer Required to Comply with 40 CFR 63, Subpart AAAA. The permittee is no longer required to comply with the requirements of 40 CFR Part 63, Subpart AAAA when the landfill meets the collection and control system removal requirements in **Specific Condition No. A.6.d below** (40 CFR 63.1957). [Rule 62-204.800(11), F.A.C; Rule 2.201, JEPB; and 40 CFR 63.1950]

Gas Collection Technology

A.6. Landfill Gas Collection and Control System. The permittee shall install, maintain and operate a collection and control system that captures the gas generated within the landfill and that meets the following requirements:

a. An active collection system shall:

(1) 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 system equipment;

(2) 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:

(a) five years or more if active;

(b) or two years or more if closed or at final grade.

(3) Collect gas at a sufficient extraction rate;

(4) Be designed to minimize off-site migration of subsurface gas.

[Rule 62-204.800(8), F.A.C. and Rule 62-204.800(11), F.A.C.; Rule 2.201, JEPB; 40 CFR 60.762(b)(2)(ii)(C) and 40 CFR 63.1959(b)(2)(ii)(B)]

b. Route all the collected gas to a control system that complies with the requirements in either:

(1) *Control System- Non-Enclosed Flare.* Route all the collected gas to a control system that is a non-enclosed flare designed and operated in accordance with 40 CFR 63.11 (b) (and 40 CFR 60.18) except as noted in 40 CFR 63.1959(e) (and 40 CFR 60.764(e)) (see **Subsection B.1 below);** or

(2) *Control System- Subsequent Sale of Beneficial Use of Collected Gas.* Route the collected gas to a treatment system that processes the collected gas for the six landfill gas fired internal combustion engines at the Trail Ridge Energy, LLC, Trail Ridge Energy Facility (AIRS ID 0310654)**.**

[Rule 62-204.800(8), F.A.C. and Rule 62-204.800(11), F.A.C.; Rule 2.201, JEPB; 40 CFR 60.762(b)(2)(iii) and 40 CFR 63.1959(b)(2)(iii)]

c. *Operation.* Operate the collection system installed to comply with the provisions of 40 CFR 63.1958, 40 CFR 63.1960, and 40 CFR 63.1961 (see **Specific Condition Nos. A.10. through A.15. and A.19. through A.21 below** and the control device according to **Subsection B.1 below)**. [Rules 62-204.800(8), F.A.C., 62-204.800(11), F.A.C.; Rule 2.201, JEPB; 40 CFR 60.762(b)(2)(iv), and 40 CFR 63.1957(a)]

d. *Removal.* The collection and control system may be capped or removed or decommissioned if the following criteria are met:

(1) The landfill is a closed landfill as defined in 40 CFR 63.1990 (and 40 CFR 60.761). A closure report shall be submitted to the Department as provided in 40 CFR 63.1981(f) (and 40 CFR 60.767(e)) (see **Specific Condition No. A.30 below)**;

(2) The gas collection and control system (GCCS) shall have been in operation a minimum of 15 years, or the landfill permittee demonstrates that the GCCS will be unable to operate for 15 years due to declining gas flow; and

(3) Following the procedures specified in 40 CFR 63.1959(c) (and 40 CFR 60.764(b)) (see **Specific Condition No. A.24 below**), the calculated NMOC emission rate at the landfill is less than 34 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.

[Rules 62-204.800(8), F.A.C. 62-204.800(11), F.A.C.; Rule 2.201, JEPB; 40 CFR 60.762(b)(2)(v), and 40 CFR 63.1957(b)]

[Rules 62-204.800(8), F.A.C., 62-204.800(11), F.A.C.; Rule 2.201, JEPB; 40 CFR 60.762(b)(2)(ii), (iii), (iv), & (v), and 40 CFR 63.1957]

A.7. Landfill Gas Collection and Control System. Any excess landfill gas that exceeds the volume the Trail Ridge Energy LLC, Trail Ridge Energy Facility is able to accept shall be diverted to the 5,000 scfm flare for control. Collected LFG shall not be vented to the ambient air. Venting of treated landfill gas to the ambient air is not allowed.
[Rule 62-204.800(8), F.A.C.; Rule 2.201, JEPB; 40 CFR 60.762(b)(2)(iii)(A) and (C), 40 CFR 63.1959(b)(2)(iii)(A) and (C); and, Permit No. 0310358-004-AC/PSD-FL-374]

{Permitting Note: See Appendix Approved Alternate Procedures.}

A.8. Landfill Closure. When an MSW landfill subject to 40 CFR 60 Subpart XXX is closed, the permittee is no longer subject to the requirement to maintain an operating permit under 40 CFR Part 70 or 71 of this chapter for the landfill if the landfill is not otherwise subject to the requirements of either 40 CFR Part 70 or 71 and if the permittee meets the conditions for control system removal specified in **Specific Condition No. A.6.d above** (40 CFR 63.1959). [Rule 62-204.800(8), F.A.C.; Rule 2.201, JEPB; and 40 CFR 60.762(d)]

Specifications for Active Collection Systems

A.9. Specifications. To comply with **Specific Condition No. A.6 above** the permittee shall:

a. 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 Department as provided in 40 CFR 63.1981(d)(2) and (3) (and 40 CFR 60.767(c)(2) and (3)).

(1) The collection devices within the interior 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,

resistance to the refuse decomposition heat, and ability to isolate individual components or sections for repair or troubleshooting without shutting down entire collection system.

(2) The sufficient density of gas collection devices determined in **paragraph a.(1) above** 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.

(3) The placement of gas collection devices determined in **paragraph a.(1) above** shall control all gas producing areas, except as provided by **paragraphs a.(3)(a) and a.(3)(b) below**.

(a) Any segregated area of asbestos or nondegradable material may be excluded from collection if documented as provided under **Specific Condition No.** Error! Reference source not found.**A.40.** 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 Department upon request.

(b) 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 one 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 Department 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.

i. The NMOC emissions from each section proposed for exclusion shall be computed using Equation 7:

$$Q_i = 2\,k\,L_o\,M_i\,e^{-kt_i}\,(C_{NMOC})(3.6\,x\,10^{-9}) \qquad \text{(Eq. 7)}$$

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.
$3.6 \times 10{-}9$ = Conversion factor.

ii. If the permittee s proposing to exclude, or cease gas collection and control from, nonproductive physically separated (e.g., separately lined) closed areas that already have gas collection systems, NMOC emissions from each physically separated closed area shall be computed using either Equation 3 in **Specific Condition No. A.24 below** (40 CFR 63.1959) or Equation 7 above.

(c) 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} of 0.05/year, 170 m^3/Mg, and 4,000 ppmv as hexane or the alternative values determined as prescribed in 40 CFR 60.764(a)(1) and 40 CFR 1959(a)(1), and 40 CFR 60.764(a)(5) and 40 CFR 63.1959(a)(5) shall be used. 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)(a) above**.

[Rules 62-204.800(8), F.A.C., 62-204.800(11), F.A.C.; Rule 2.201, JEPB; 40 CFR 60.769(a) and 40 CFR 63.1962(a)]

b. Construct the gas collection devices using the following equipment or procedures:

(1) 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.

(2) 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

(3) 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.

[Rules 62-204.800(8), F.A.C., 62-204.800(11), F.A.C.; Rule 2.201, JEPB; 40 CFR 60.769(b) and 40 CFR 63.1962(b)]

c. Each permittee seeking to comply with **Specific Condition No. A.6.b above** shall convey the landfill gas to a control system in compliance with **Specific ConditionA.6.b above No. A.6.b above** 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.

(1) 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) below** shall be used.

(2) For new collection systems, the maximum flow rate shall be in accordance with 40 CFR 63.1960(a)(1) (and 40 CFR 60.765(a)(1)) (see **Specific Condition No.** Error! Reference source not found.**)**.

[Rules 62-204.800(8), F.A.C., 62-204.800(11), F.A.C.; Rule 2.201, JEPB; 40 CFR 63 1962(c) and 40 CFR 60.769(c)]

Operational Standards for Collection and Control Systems

A.10. Operational Standards. The permittee shall:

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:
(1) Five years or more if active; or
(2) Two years or more if closed or at final grade.

b. Operate the collection system with negative pressure at each wellhead except under the following conditions:
(1) 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 40 CFR 63.1981(h**) (see Specific Condition No. A.32.a.**Error! Reference source not found.**)**;
(2) Use of a geomembrane or synthetic cover. The permittee shall develop acceptable pressure limits in the design plan;
(3) A decommissioned well. A well may experience a static positive pressure after shutdown to accommodate for declining flows. All design changes shall be approved by the Department as set forth in 40 CFR 63.1981(d)(2);

c. Operate each interior wellhead in the collection system with a landfill gas temperature less than 62.8 degrees Celsius (145 degrees Fahrenheit). The permittee may establish a higher operating temperature value at a particular well. A higher operating value demonstration shall be submitted to the Department for approval and shall include supporting data demonstrating that the elevated parameter neither causes fires nor significantly inhibits anaerobic decomposition by killing methanogens. The demonstration shall satisfy both criteria in order to be approved (i.e., neither causing fires nor killing methanogens is acceptable).

{Permitting Note: The permittee shall comply with a higher operating wellhead temperature of 62.8°C (145°F) in 40 CFR 63, Subpart AAAA in lieu of the lower limit of 55°C (131°F) in 40 CFR 60, Subpart XXX. See Appendix for FDEP's conditional approval of well-specific LFG higher operating temperatures for several LFG extraction wells.}

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 using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in 40 CFR 63.1960(c) (see **Specific Condition No. A.13 below).** The permittee shall conduct surface testing around the perimeter of the collection area and along a pattern that traverses the landfill at no more than 30-meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover and all cover penetrations. Thus, the permittee shall monitor any openings that are within an area of the landfill where waste has been placed and a gas collection system is required. The permittee may establish an alternative traversing pattern that ensures equivalent coverage. Determine the latitude and longitude coordinates of each exceedance using an instrument with an accuracy of at least 4 meters. The coordinates shall be in decimal degrees with at least five decimal places. 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.

e. Operate the collection system in accordance with 40 CFR 63.1955(c) such that all collected gases are vented to a control system designed and operated in compliance with 40 CFR 63.1959(b)(2)(iii) and 40 CFR 60.762(b)(2)(iii) (see **Specific Condition No. A.6 above)**. In the event the collection or control system is not operating, 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 one hour of the collection or control system not operating; and efforts to repair the collection or control system shall be initiated and completed in a manner such that downtime is kept to a minimum, and the collection and control system shall be returned to operation.

f. Operate the control system at all times when the collected gas is routed to the system.

g. If monitoring demonstrates that the operational requirements in **paragraphs b., c., or d above** of this Specific Condition are not met, corrective action shall be taken as specified in **Specific Condition Nos. c. and d.** or **Specific Condition No. A.13. below**. If corrective actions are taken as specified in **Specific Condition Nos. A.11., A.12., A.13., A.14., and A.15 below**, the monitored exceedance is not a violation of the operational requirements in this Specific Condition.

[Rule 62-204.800(8), F.A.C.; Rule 2.201, JEPB; 40 CFR 60.763 and 40 CFR 63.1958]

{Permitting Note: See Appendix Approved Alternate Procedures.}

Compliance Provisions

A.11. Gas Collection System. Except as provided in 40 CFR 63.1981(d)(2), the specified methods in **paragraphs** Error! Reference source not found.**. through e below** of this **Specific Condition** shall be used to determine whether the gas collection system is in compliance with **Specific Condition No. A.6 above**.

a. For the purposes of calculating the maximum expected gas generation flow rate from the landfill to determine compliance with 40 CFR 63.1959(b)(2)(ii)(C)(1)., either Equation 5 or Equation 6 shall be used. The methane generation rate constant (k) and methane generation potential (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. If k has been determined as specified in 40 CFR 63.1959(a)(4) (*i.e.*, Tier 3), the value of k determined from the test shall be used. 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.

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

$$Q_m = 2\ L_o\ R\ (e^{-kc} - e^{-kt}) \qquad \text{(Eq. 5)}$$

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 $e^{-kc} = 1$)

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

$$Q_m = \sum_{i=1}^{n} 2\ k\ L_o\ M_i\ (e^{-kt_i}) \qquad \text{(Eq. 6)}$$

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

(3) 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, Equation 5 or Equation 6 in paragraphs above. If the landfill is still accepting waste, the actual measured flow data will not equal the maximum expected gas generation rate, so calculations using Equation 5 or Equation 6 above 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.

b. For the purposes of determining sufficient density of gas collectors for compliance with **Specific Condition No. A.6.a(2) above**, the permittee shall design a system of vertical wells, horizontal collectors, or other collection devices, satisfactory to the Department, capable of controlling and extracting gas from all portions of the landfill sufficient to meet all operational and performance standards.

c. For the purposes of demonstrating whether the gas collection system flow rate is sufficient to determine compliance with **Specific Condition No. A.6.a(3) above**, the permittee shall measure gauge pressure in the gas collection header applied to 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 **Specific Condition No. A.10.b above**. 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 Department for approval.

(1) If negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement of positive pressure, the permittee shall conduct a root cause analysis and correct the exceedance as soon as practicable, but no later than 60 days after positive pressure was first

measured. The permittee shall keep records according to 40 CFR 63.1983(e)(3) (see **Specific Condition No. A.41.c below)**.

(2) If corrective actions cannot be fully implemented within 60 days following the positive pressure measurement for which the root cause analysis was required, the permittee shall also conduct a corrective action analysis and develop an implementation schedule to complete the corrective action(s) as soon as practicable, but no more than 120 days following the positive pressure measurement. The permittee shall submit the items listed in 40 CFR 63.1981(h)(7) (see **Specific Condition No. A.32.g.**Error! Reference source not found.) as part of the next annual report. The permittee shall keep records according to 40 CFR 63.1983(e)(4) (see **Specific Condition No. A.41.d below).**

(3) If corrective action is expected to take longer than 120 days to complete after the initial exceedance, the permittee shall submit the root cause analysis, corrective action analysis, and corresponding implementation timeline to the Department, according to 40 CFR 63.1981(j) (see **Specific Condition No. A.34.**Error! Reference source not found.). The permittee shall keep records according to 40 CFR 63.1983(e)(4) (see **Specific Condition No. A.41.e below).**

d. For the purpose of identifying whether excess air infiltration into the landfill is occurring, the permittee shall monitor each well monthly for temperature as provided in 40 CFR 63.1958 (see **Specific Condition No. A.10.c above**). If a well exceeds the operating parameter for temperature, action shall be initiated to correct the exceedance within five calendar days. Any attempted corrective measure shall not cause exceedances of other operational or performance standards.

(1) If a landfill gas temperature less than 62.8 degrees Celsius (145 degrees Fahrenheit) cannot be achieved within 15 calendar days of the first measurement of landfill gas temperature greater than 62.8 degrees Celsius (145 degrees Fahrenheit), the permittee shall conduct a root cause analysis and correct the exceedance as soon as practicable, but no later than 60 days after a landfill gas temperature greater than 62.8 degrees Celsius (145 degrees Fahrenheit) was first measured. The permittee shall keep records according to 40 CFR 63.1983(e)(3) (see **Specific Condition No. A.41.c below**).

(2) If corrective action cannot be fully implemented within 60 days following the positive pressure measurement for which the root cause analysis was required, the permittee shall also conduct a corrective action analysis and develop an implementation schedule to complete the corrective action(s) as soon as practicable, but no more than 120 days following the measurement of landfill gas temperature greater than 62.8 degrees Celsius (145 degrees Fahrenheit). The permittee shall submit the items listed in 40 CFR 63.1981(h)(7) (see **Specific Condition No. A.32.g below**) as part of the next annual report. The permittee shall keep records according to 40 CFR 63.1983(e)(4) (see **Specific Condition No. A.41.d below**).

(3) If corrective action is expected take longer than 120 days to complete after the initial exceedance, the permittee shall submit the root cause analysis, corrective action analysis, and corresponding implementation timeline to the Department, according to 40 CFR 63.1981(h)(7) and (j) (see **Specific Condition Nos. A.32.g below. and A.34 below**). The permittee shall keep records according to 40 CFR 63.1983(e)(5) (see **Specific Condition No. A.41.d below**).

(4) If a landfill gas temperature measured at either the wellhead or at any point in the well is greater than or equal to 76.7 degrees Celsius (170 degrees Fahrenheit) and the carbon monoxide concentration measured, according to the procedures in 40 CFR 63.1961(a)(5)(vi) (see **Specific Condition No. A.19.d.(6) below**) is greater than or equal to 1,000 ppmv the corrective action(s) for the wellhead temperature standard (62.8 degrees Celsius (145 degrees Fahrenheit)) shall be completed within 15 days.

e. A permittee seeking to demonstrate compliance with 40 CFR 63.1957 (see **Specific Condition No. A.6.a(4) above**) through the use of a collection system not conforming to the specifications provided in 40 CFR 63.1962 (see **Specific Condition No. A.9 above)** shall provide information satisfactory to the

Department within the Collection and Control System design plan demonstrating that off-site migration is being controlled.

[Rule 62-204.800(11), F.A.C.; Rule 2.201, JEPB; and 40 CFR 63.1960(a)]

{Permitting Note: See Appendix Approved Alternate Procedures.}

A.12. Well Installation. For purposes of compliance with **Specific Condition No. A.10.a above**, the permittee of a controlled landfill 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.

a. Five years or more if active; or
b. Two years or more if closed or at final grade.

[Rules 62-204.800(8), F.A.C.; 62-204.800(11), F.A.C.; Rule 2.201, JEPB; 40 CFR 60.765(b) and 40 CFR 63.1960(b)]

A.13. Surface Methane Concentration Monitoring. The following procedures shall be used for compliance with the surface methane operational standard as provided in 40 CFR 63.1958(d) (see **Specific Condition No. A.10.d above**).

a. After installation and startup of the gas 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 40 CFR 63.1960(d) (see **Specific Condition No. A.14 below**).
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.
c. Surface emission monitoring shall be performed in accordance with section 8.3.1 of Method 21 of appendix A-7 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.
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 d.(1) through (5) below** shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of 40 CFR 63.1958(d) (see **Specific Condition No. A.10.d above**).
    (1) The location of each monitored exceedance shall be marked, and the location and concentration recorded. The location shall be recorded using an instrument with an accuracy of at least four meters. The coordinates shall be in decimal degrees with at least five decimal places.
    (2) 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.
    (3) 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 d.(5) below** of this condition shall be taken, and no further monitoring of that location is required until the action specified in **paragraph d.(5) below** of this condition has been taken.
    (4) 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 d.(2) or d.(3) above** 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 d(3) above or d.(5) below** shall be taken.
    (5) 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 Department for approval.

e. The permittee shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.

[Rules 62-204.800(8), F.A.C., 62-204.800(11), F.A.C.; Rule 2.201, JEPB; 40 CFR 60.765(c) and 40 CFR 63.1960(c)]

{Permitting Note: See Appendix Approved Alternate Procedures.}

A.14. Surface Methane Monitoring Instrumentation. The permittee seeking to comply with the provisions in 40 CFR 63.1960(c) (see **Specific Condition No. A.13 above**) shall comply with the following instrumentation specifications and procedures for surface emission monitoring devices:

a. The portable analyzer shall meet the instrument specifications provided in section 6 of Method 21 of Appendix A of Part 60, except that "methane" replaces all references to "VOC".
b. The calibration gas shall be methane, diluted to a nominal concentration of 500 ppm in air.
c. To meet the performance evaluation requirements in section 8.1 of Method 21 of appendix A of this part, the instrument evaluation procedures of section 8.1 of Method 21 of appendix A of Part 60 shall be used.
d. The calibration procedures provided in sections 8 and 10 of Method 21 of appendix A of Part 60 shall be followed immediately before commencing a surface monitoring survey.

[Rules 62-204.800(8), F.A.C., 62-204.800(11), F.A.C.; Rule 2.201, JEPB; 40 CFR 60.765(d) and 40 CFR 63.1960(d)]

A.15. Startup – Shutdown – Malfunction (SSM). The provisions of 40 CFR 63, Subpart AAAA apply at all times, including periods of SSM, provided that the duration of SSM does not exceed five days for collection systems and does not exceed one hour for treatment or control devices. During periods of SSM, you shall comply with the work practice requirement specified in 40 CFR 63.1958(e) (see **Specific Condition No. A.10A.10.e.**) in lieu of the compliance provisions in 40 CFR 63.1960. [Rule 62-204.800(11), F.A.C.; Rule 2.201, JEPB; and, 40 CFR 63.1960(e)]

A.16. Operation and Maintenance Requirements. At all times, the permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if the requirements of this subpart have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Department which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
[Rule 62-204.800(11), F.A.C; Rule 2.201, JEPB; and, 40 CFR 63.1955(c)]

A.17. Determining Compliance with 40 CFR 63, Subpart AAAA. Compliance is determined using performance testing, monitoring of the collection system, continuous parameter monitoring, and other credible evidence. In addition, continuous parameter monitoring data, collected under 40 CFR 63.1961(b)(1), (c)(1), and (d), are used to demonstrate compliance with the operating conditions for control systems. If a deviation occurs, you have failed to meet the control device operating conditions described in 40 CFR 63 Subpart AAAA and have deviated from the requirements of 40 CFR 63 Subpart AAAA. Compliance with the emissions standards and the operating standards of 40 CFR 63.1958 (See **Specific Condition No. A.10.**) is required at all times. [Rule 62-204.800(11), F.A.C.; Rule 2.201, JEPB; and 40 CFR 63.1964]

A.18. Deviation for 40 CFR 63, Subpart AAAA. A deviation is defined in 40 CFR 63.1990. For the purposes of the landfill monitoring and SSM plan requirements, deviations include the items below.

a. A deviation occurs when the control device operating parameter boundaries described in 40 CFR 63.1983(c)(1) are exceeded.
b. A deviation occurs when 1 hour or more of the hours during the 3-hour block averaging period does not constitute a valid hour of data. A valid hour of data shall have measured values for at least three 15-minute monitoring periods within the hour.

[Rule 62-204.800(11), F.A.C.; Rule 2.201, JEPB; and, 40 CFR 63.1965]

Monitoring of Operations

A.19. Active Gas Collection Systems. 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:

a. Measure the gauge in the gas collection header on a monthly basis as provided in 40 CFR 63.1960(a)(3)) (see **Specific Condition No. A.11.c.)**; and

b. Monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis as follows:
   (1) The nitrogen level shall be determined using Method 3C of 40 CFR 60 Appendix A-2, unless an alternative test method is established as allowed by 40 CFR 63.1981(d)(2).
   (2) Unless an alternative test method is established, the oxygen level shall be determined by an oxygen meter using Method 3A, 3C, or ASTM D6522-11 (incorporated by reference, see 40 CFR 63.14). Determine the oxygen level by an oxygen meter using Method 3A, 3C, or ASTM D6522-11 (if sample location is prior to combustion) except that:
      (a) The span shall be set between 10 and 12 percent oxygen;
      (b) A data recorder is not required;
      (c) Only two calibration gases are required, a zero and span;
      (d) A calibration error check is not required;
      (e) The allowable sample bias, zero drift, and calibration drift are ±10 percent.
   (3) A potable gas composition analyzer may be used to monitor the oxygen levels provided:
      (a) The analyzer is calibrated; and
      (b) The analyzer meets all quality assurance and quality control requirements for Method 3A of 40 CFR 60, Appendix A-2 or ASTM D6522-11 (incorporated by reference, see 40 CFR 63.14).

c. Monitor temperature of the landfill gas on a monthly basis as provided in 40 CFR 63.1960(a)(4) (see **Specific Condition No. A.11.d above**). The temperature measuring device shall be calibrated annually using the procedure in 40 CFR part 60, appendix A-1, Method 2, Section 10.3.

d. Unless a higher operating temperature value has been approved by the Department, the permittee shall initiate enhanced monitoring at each well with a measurement of landfill gas temperature greater than 62.8 degrees Celsius (145 degrees Fahrenheit) as follows:
   (1) Visual observations for subsurface oxidation events (smoke, smoldering ash, damage to well) within the radius of influence of the well.
   (2) Monitor oxygen concentration as provided in **paragraph b(2) above.**.
   (3) Monitor temperature of the landfill gas at the wellhead as provided in **paragraph c above**.
   (4) Monitor temperature of the landfill gas every ten vertical feet of the well as provided in **paragraph e below**.
   (5) Monitor the methane concentration with a methane meter using EPA Method 3C of 40 CFR 60, Appendix A-6, or a portable gas composition analyzer to monitor the methane levels provided that the analyzer is calibrated, and the analyzer meets all quality assurance and quality control requirements for EPA Method 3C or EPA Method 18.
   (6) Monitor and determine carbon monoxide concentrations, as follows:
      (a) Collect the sample from the wellhead sampling port in a passivated canister or multi-layer foil gas sampling bag (such as the Cali-5-Bond Bag) and analyze that sample using 40 CFR 60, EPA Method 10 of Appendix A-4, or an equivalent method with a detection limit of at least 100 ppmv of carbon monoxide in high concentrations of methane; or
      (b) Collect and analyze the sample from the wellhead using 40 CFR 60, EPA Method 10 of Appendix A-4 to measure carbon monoxide concentrations.
      (c) When sampling directly from the wellhead, you shall sample for five minutes plus twice the response time of the analyzer. These values shall be recorded. The five 1-minute averages are then averaged to give you the carbon monoxide reading at the wellhead.

(d) When collecting samples in a passivated canister or multi-layer foil sampling bag, you shall sample for the period of time needed to assure that enough sample is collected to provide five consecutive, one minute samples during the analysis of the canister or bag contents, but no less than five minutes plus twice the response time of the analyzer. The five consecutive, one minute averages are then averaged together to give you a carbon monoxide value from the wellhead.

(7) The enhanced monitoring described in **paragraph d above** shall begin seven calendar days after the first measurement of landfill gas temperature greater than 63.8 degrees Celsius (145 degrees Fahrenheit); and

(8) The enhanced monitoring in **paragraph e below** shall be conducted on a weekly basis. If four consecutive weekly carbon monoxide readings are under 100 ppmv, then enhanced monitoring may be decreased to monthly. However, if carbon monoxide readings exceed 100 ppmv again, the landfill shall return to weekly monitoring.

(9) The enhanced monitoring in **paragraph e below** can be stopped once a higher operating value is approved, at which time the monitoring provisions issued with the higher operating value should be followed, or once the measurement of landfill gas temperature at the wellhead is less than or equal to 62.8 degrees Celsius (145 degrees Fahrenheit).

e. For each wellhead with a measurement of landfill gas temperature greater than or equal to 73.9 degrees Celsius (165 degrees Fahrenheit), annually monitor temperature of the landfill gas every ten vertical feet of the well. This temperature can be monitored either with a removable thermometer or using temporary or permanent thermocouples installed in the well.

[Rule 62-204.800(11), F.A.C.; Rule 2.201, JEPB; and, 40 CFR 63.1961(a)]

A.20. Alternative Collection System or Parameter Monitoring. The permittee seeking to install a collection system that does not meet the specifications in 40 CFR 63.1962 (see **Specific Condition No. A.9 above**) or seeking to monitor alternative parameters to those required by 40 CFR 63.1958 through 40 CFR 63.1961 (see **Specific Condition Nos. A.10. through A.15 above and A.19. through A.21 below**) shall provide information satisfactory to the Department as provided in 40 CFR 63.1981(d)(2) and (3) describing the design and operation of the collection system, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. The Department may specify additional appropriate monitoring procedures. [Rules 62-204.800(8), F.A.C., 62-204.800(11), F.A.C.; Rule 2.201, JEPB; 40 CFR 63.1961(e) and 40 CFR 60.766(e)]

A.21. Surface Methane Concentrations- Alternative Monitoring Frequency. The permittee seeking to demonstrate compliance with the 500 parts per million surface methane operational standard in **Specific Condition No. A.10.d above** shall monitor surface concentrations of methane according to the procedures in **Specific Condition No. A.13 above** and the instrument specifications in **Specific Condition No. A.14 above**. If the permittee is complying with the 500-ppm surface methane operational standard in 40 CFR 63.1958(d)(2), for location the permittee shall determine the latitude and longitude coordinates of each exceedance using an instrument with an accuracy of at least 4 meters and the coordinates shall be in decimal degrees with at least five decimal places. In the semi-annual report in 40 CFR 63.1981(h) (see **Specific Condition No. A.32.**), the permittee shall report the location of each exceedance of the 500-ppm methane concentration as provided in 40 CFR 63.1958(d) (see **Specific Condition No. A.10.d**.) and the concentration recorded at each location for which an exceedance was recorded in the previous month. 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. [Rule 62-204.800(11), F.A.C.; Rule 2.201, JEPB; and, 40 CFR 63.1961(f)]

A.22. Landfill Gas Treatment System Monitoring of Operations. The permittee seeking to demonstrate compliance with 40 63.1959(b)(2)(iii)(C)(b)(2)(iii) using a landfill gas treatment system shall calibrate, maintain and operate according to the manufacturer's specifications a device that records flow to the

treatment system and bypass of the treatment system (if applicable). The permittee shall maintain and operate all monitoring systems associated with the treatment system in accordance with the site-specific treatment system monitoring plan required in **Specific Condition No. A.38.c**. The permittee shall:

a. Install, calibrate, and maintain a gas flow rate measuring device that records the flow to the treatment system at least every 15 minutes; and
b. 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.

[40 CFR 63.1961(g); Rule 62-204.800(11), F.A.C.; and Rule 2.201, JEPB]

A.23. Applicability of Monitoring Requirements. The monitoring requirements of **Specific Condition No. A.19.a. and Specific Condition No. A.22.** apply at all times the affected source is operating, except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. The permittee is required to complete monitoring system repairs in response to monitoring system malfunctions and to return the monitoring system to operation as expeditiously as practicable. [Rule 62-204.800(11), F.A.C.; Rule 2.201, JEPB; and, 40 CFR 63.1961(h)]

A.24. NMOC Emission Rate for Decommission of CCS. The permittee shall calculate the NMOC emission rate for purposes of determining when the system can be capped, removed or decommissioned as provided in **Specific Condition No. A.6.d above**, using Equation 3:

$M_{NMOC} = 1.89 \times 10^{-3} Q_{LFG} C_{NMOC}$ (Eq. 3)

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.

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 system using a gas flow measuring device calibrated according to the provisions of section 10 of Method 2E of appendix A of Part 60.
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 25 or Method 25C. The sample location on the common header pipe shall be before any condensate removal or other gas refining units. The landfill permittee shall divide the NMOC concentration from Method 25 or Method 25C of appendix A of Part 60 by six to convert from C_{NMOC} as carbon to C_{NMOC} as hexane.
c. The permittee may use another method to determine landfill gas flow rate and NMOC concentration if the method has been approved by the Department.
   Within 60 days after the date of completing each performance test (as defined in 40 CFR 60.8), the permittee shall submit the results of the performance test, including any associated fuel analyses, according to **Specific Condition No. A.33.a**Error! Reference source not found..

[Rules 62-204.800(8), F.A.C.; 62-204.800(11), F.A.C.; Rule 2.201, JEPB; 40 CFR 60.764(b) and 40 CFR 63.1959(c)]

A.25. Additional Compliance Test Requirements. When calculating emissions for PSD purposes, the permittee of each MSW landfill subject to the provisions of this subpart shall estimate the NMOC emission rate for comparison to the PSD major source and significance levels in 40 CFR 51.166 or 52.21 using Compilation of Air Pollutant Emission Factors, Volume I: Stationary Point and Area Sources (AP-42) or other approved measurement procedures. [Rule 62-204.800(8), F.A.C.; Rule 2.201, JEPB; and, 40 CFR 60.764(c)]

A.26. Compliance Averages for 40 CFR 63, Subpart AAAA. Three hour block averages are calculated in the same way as they are calculated in 40 CFR 63.1983(b)(2)(i) for average combustion temperature, except that the data collected during the events listed in **paragraphs a. –d**. are not to be included in any average computed under Subpart AAAA.

a. Monitoring systems breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments;
b. Startups;
c. Shutdowns;
d. Malfunctions.

[Rule 62-204.800(11), F.A.C.; Rule 2.201, JEPB; and, 40 CFR 63.1975]

Recordkeeping and Reporting Requirements

A.27. Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority.

Report	To Whom	Reporting Deadline	Related Condition(s)
Revised Design Plan	DEP	90 days before expanding operations, and prior to expanding the gas collection system.	**A.29**
Facility Closure Report	DEP	Within 30 days of Waste Acceptance Cessation.	**A.30**
Equipment Removal Report	DEP	30 days prior to removal or cessation of operation of the control equipment.	**A.31**
Semi-Annual Report	EPA and DEP	Every 6 months	**A.32**
Corrective Action and Corresponding Timeline Report	DEP	75 days after the first measurement of positive pressure or temperature exceedance.	**A.34**
Asbestos Disturbance Notice	DEP	45 days prior to disturbance	**A.36**

[Rule 62-213.440(1)(b), F.A.C.; Rule 2.501, JEPB]

A.28. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.; and Rule 2.501, JEPB]

A.29. Revised Design Plan. The permittee shall submit a revised Collection and Control System design plan as described in 40 CFR 63.1981(d) (and 40 CFR 60.767(c)), to the Department for approval as follows:

a. At least 90 days before expanding operations to an area not covered by the previously approved design plan.
b. Prior to installing or expanding the gas collection system in a way that is not consistent with the design plan that was submitted to the Department.

[Rules 62-204.800(8), F.A.C.; 62-204.800(11), F.A.C.; Rule 2.201, JEPB; 40 CFR 60.767(d) and 40 CFR 63.1981(e)]

A.30. Facility Closure Report. The permittee shall submit a closure report to the Department within 30 days of waste acceptance cessation. The Department 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 Department, no additional wastes may be placed into the landfill without filing a notification of modification as described under 40 CFR 60.7(a)(4). [Rules 62-204.800(8), F.A.C., 62-204.800(11), F.A.C.; Rule 2.201, JEPB; 40 CFR 60.767(e) and 40 CFR 63.1981(f)]

{Permitting Note: This facility is expected to remain active for the life of this Title V permit (0310358-020-AV). Therefore, this closure report is not expected to be required for this permit.}

A.31. Equipment Removal Report. The permittee shall submit an equipment removal report to the Department 30 days prior to removal or cessation of operation of the control equipment.

a. The equipment removal report shall contain all of the following items:
   (1) A copy of the closure report submitted in accordance with **Specific Condition No. A.30 above**;
   (2) A copy of the initial performance test report demonstrating that the 15-year minimum control period has expired, unless the report of the results of the performance test has been submitted to the EPA via the EPA's CDX, or information that demonstrates that the GCCS will be unable to operate for 15 years due to declining gas flows. In the equipment removal report, the process unit(s) tested, the pollutant(s) tested, and the date that such performance test was conducted may be submitted in lieu of the performance test report if the report has been previously submitted to the EPA's CDX; and
   (3) Dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 34 megagrams or greater of NMOC per year, unless the NMOC emission rate reports have been submitted to the EPA via the EPA's CDX. If the NMOC emission rate reports have been previously submitted to the EPA's CDX, a statement that the NMOC emission rate reports have been submitted electronically and the dates that the reports were submitted to the EPA's CDX may be submitted in the equipment removal report in lieu of the NMOC emission rate reports.

b. The Department may request such additional information as may be necessary to verify that all of the conditions for removal in 40 CFR 60.762(b)(2)(v) (see **Specific Condition No. A.6.d above**) have been met.

[Rules 62-204.800(8); Rule 62-204.800(11), F.A.C.; Rule 2.201, JEPB; 40 CFR 60.767(f) and 40 CFR 63.1981(g)]

A.32. Semi-Annual Report. The permittee shall submit to the Department, following the procedure specified in **Specific Condition No. A.33 below**, semi-annual reports of the recorded information in **paragraphs a. through g below**. For enclosed combustion devices and flares, reportable exceedances are defined under **Specific Condition No. A.38 below**.

a. Number of times that applicable parameters monitored under 40 CFR 63.1958(b), (c), and (d) (see **Specific Condition Nos. A.10.b, A.10.c, and A.10.d**) were exceeded and when the gas collection and control system was not operating under 40 CFR 63.1958(e) (see **Specific Condition No. A.10.e**), including periods of SSM. For each instance, report the date, time, and duration of each exceedance.
   (1) Provide a statement of the wellhead operational standard for temperature and oxygen you are complying with for the period covered by the report. Indicate the number of times each of those parameters monitored under 40 CFR 63.1961(a)(4) (see **Specific Condition A.19.c**) were exceeded. For each instance, report the date, time, and duration of each exceedance.
   (2) Number of times the parameters for the site-specific treatment system in 40 CFR 63.1961(g) (see **Specific Condition A.22**) were exceeded.

b. Description and duration of all periods when the gas stream was diverted from the control device or treatment system through a bypass line or the indication of bypass flow as specified **Specific Condition No. A.22.**

c. Description and duration of all periods when the control device or treatment system was not operating and length of time the control device or treatment system was not operating.

d. All periods when the collection system was not operating.

e. The location of each exceedance of the 500 parts per million methane concentration as provided in **Specific Condition No. A.10.d.** and the concentration recorded at each location for which an exceedance was recorded in the previous month. For location, you shall determine the latitude and longitude coordinates using an instrument with an accuracy of at least 4 meters. The coordinates shall be in decimal degrees with at least five decimal places.

f. The date of installation and the location of each well or collection system expansion added pursuant to **Specific Condition Nos. A.11.c.** and **d.**, **A.12.**, and **A.13.d.**

g. For any corrective action analysis for which corrective actions are required in **Specific Condition Nos. A.11.c.** or **d.** and that take more than 60 days to correct the exceedance, the root cause analysis conducted,

including a description of the recommended corrective action(s), the date for corrective action(s) already completed following the positive pressure reading, and, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates.

h. When required to conduct enhanced monitoring in 40 CFR 63.1961(a)(5) and (6) (see **Specific Condition Nos A.19(d) and A.19(e)**) the permittee shall include the results of all monitoring activities conducted during the period.
   (1) For each monitoring point, report the date, time, and well identifier along with the value and units of measure for oxygen, temperature (wellhead and downwell), methane, and carbon monoxide.
   (2) Include a summary trend analysis for each well subject to the enhanced monitoring requirements to chart the weekly readings over time for oxygen, wellhead temperature, methane, and weekly or monthly readings over time, as applicable for carbon monoxide.
   (3) Include the date, time, staff person name, and description of findings for each visual observation for subsurface oxidation event.

[Rules 62-204.800(8), F.A.C., 62-204.800(11), F.A.C.; Rule 2.201, JEPB; 40 CFR 60.767(g) and 40 CFR 63.1981(h)(1), (h)(1)(i) and (iii), (h)(2)-(8)]

A.33. Electronic Reporting. The permittee shall submit reports electronically according to **paragraphs** Error! Reference source not found.**. and** Error! Reference source not found..

a. Within 60 days after the date of completing each performance test (as defined in 40 CFR 60.8), the permittee shall submit the results of each performance test according to the following procedures:
   (1) Data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (*https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert*) at the time of the test. Submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through the EPA's CDX (*https://cdx.epa.gov/*). The data shall be submitted in a file format generated through the use of the EPA's ERT. Alternatively, you may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website.
   (2) Data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test. The results of the performance test shall be included as an attachment in the ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the ERT generated package or alternative file to the EPA via CEDRI.
   (3) Confidential business information (CBI). If you claim some of the information submitted under 40 CFR 63.1981(a) is CBI, you shall submit a complete file, including information claimed to be CBI, to the EPA. The file shall be generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the file on a compact disc, flash drive, or other commonly used electronic storage medium and clearly mark the medium as CBI. Mail the electronic medium to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted shall be submitted to the EPA via the EPA's CDX as described in **paragraph a.(1)** of this Specific Condition.

b. Each permittee required to submit reports following the procedure specified in this paragraph shall submit reports to the EPA via CEDRI. CEDRI can be accessed through the EPA's CDX. The permittee shall use the appropriate electronic report in CEDRI for 40 CFR 63, Subpart AAAA or an alternate electronic file format consistent with the XML schema listed on the CEDRI website (*https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri*). Once the spreadsheet template upload/forms for the reports have been available in CEDRI for 90 days, the permittee shall begin submitting all subsequent reports via CEDRI. The reports shall be submitted by the deadlines specified in this subpart, regardless of the method in which the reports are submitted. The NMOC emission rate

reports, semi-annual reports, and bioreactor 40-percent moisture reports should be electronically reported as a spreadsheet template upload/form to CEDRI. If the reporting forms specific to this subpart are not available in CEDRI at the time that the reports are due, the permittee shall submit the reports to the Administrator at the appropriate address listed in 40 CFR 63.13.

[Rules 62-204.800(8), F.A.C., 62-204.800(11), F.A.C.; Rule 2.201, JEPB; 40 CFR 60.767(i) and 40 CFR 63.1981(1)]

{Permitting Note: Reports submitted electronically to EPA using the appropriate address in 40 CFR 60.4 shall also be sent to the Department per 40 CFR 60.4.}

A.34. Corrective Action Report. The permittee shall submit information regarding corrective actions according to **paragraphs a. and** Error! Reference source not found..

a. For corrective action that is required according to 40 CFR 63.1960(a)(3) or (a)(4) (see **Specific Condition Nos. A.11c. or A.11.d above)** and is not completed within 60 days after the initial exceedance, the permittee shall submit a notification to the Department as soon as practicable but no later than 75 days after the first measurement of positive pressure or temperature exceedance.
b. For corrective action that is required according to **Specific Condition Nos. A.11c. or A.11.d above** and is expected to take longer than 120 days after the initial exceedance to complete, the permittee shall submit the root cause analysis, corrective action analysis, and corresponding implementation timeline to the Department as soon as practicable but no later than 75 days after the first measurement of positive pressure or temperature monitoring value of 62.8 degrees Celsius (145 degrees Fahrenheit) or above unless a higher operating temperature value has been approved by the Department for the well under 40 CFR 63 Subpart AAAA or under 40 CFR 60 Subpart XXX. The Department shall approve the plan for corrective action and the corresponding timeline.

[Rules 62-204.800(8), F.A.C.,62-204.800(11), F.A.C.; Rule 2.201, JEPB; 40 CFR 63.1981(j) and 40 CFR 60.767(j)]

A.35. 24-Hour High Temperature Report. Where a permittee seeks to demonstrate compliance with the operational standard for temperature in 40 CFR 63.1958(c)(1) (see **Specific Condition No. A.10.c**) and a landfill gas temperature measured at either the wellhead or at any point in the well is greater than or equal to 76.7°C (170°F) and the carbon monoxide concentration measured is greater than or equal to 1,000 ppmv, the permittee shall report the date, time, well identifier, temperature and carbon monoxide reading via email to the Department within 24 hours of the measurement unless a higher operating temperature value has been approved by the Department.

[Rule 62-204.800(11), F.A.C.; Rule 2.201, JEPB; 40 CFR 63.1981(k)]

A.36. Asbestos Disturbance Notification. The permittee shall notify the Department in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at the waste disposal site, and follow the procedures specified in the notification. If the excavation will begin on a date other than the one contained in the original notice, notice of the new start date shall be provided to the Department at least ten working days before excavation begins and in no event shall excavation begin earlier than the date specified in the original notification. Include the following information in the notice:

a. Scheduled starting and completion dates.
b. Reason for disturbing the waste.
c. Procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material. If deemed necessary, the Department may require changes in the emission control procedures to be used.
d. Location of any temporary storage site and the final disposal site.

[Rule 62-204.800(10), F.A.C.; Rule 2.201, JEPB; 40 CFR 61.154(j)]

A.37. Records. Except as provided in 40 CFR 63.1981(d)(2), each permittee of an MSW landfill subject to the provisions of 40 CFR 60.762(b)(2)(ii) and (iii) shall keep for at least 5 years up-to-date, readily accessible, on-site

records of the design capacity report that triggered 40 CFR 63.1959(b), the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable. [40 CFR 63.1983(a) and 40 CFR 60.768(a); Rule 62-204.800(8), F.A.C. and Rule 62-204.800(11), F.A.C.]

A.38. Controlled Landfill Records. Except as provided in 40 CFR 63.1981(d)(2), the permittee of the controlled landfill shall keep up-to-date, readily accessible records for the life of the control system equipment of the data listed in **paragraphs a. and b below** 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.

a. Where a permittee subject to the provisions of 40 CFR 63 Subpart AAAA seeks to demonstrate compliance with 40 CFR 63.1959(b)(2)(ii):
   (1) The maximum expected gas generation flow rate as calculated in 40 CFR 63.1960(a)(1).
   (2) The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in 40 CFR 63.1962(a)(1) and (2).

b. Where a permittee subject to the provisions of 40 CFR 63 Subpart AAAA seeks to demonstrate compliance with 40 CFR 63.1959(b)(2)(iii)(A) (See **Specific Condition No. A.6.b(1) above**) through use of a non-enclosed 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 40 CFR 63.11; continuous records of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame or the flare flame is absent.

c. Where a permittee subject to the provisions of 40 CFR 63 Subpart AAAA seeks to demonstrate compliance with 40 CFR 63.1959(b)(2)(iii)(C) (see **Specific Condition No. A.6.b(2) above**) through use of a landfill gas treatment system, the permittee shall prepare a site-specific treatment monitoring plan to include:
   (1) Monitoring records of parameters that are identified in the treatment system monitoring plan and that ensure the treatment system is operating properly for each intended end use of the treated landfill gas. At a minimum, records should include records of filtration, de-watering, and compression parameters that ensure the treatment system is operating properly for each intended end use of the treated landfill gas.
   (2) Monitoring methods, frequencies, and operating ranges for each monitored operating parameter based on manufacturer's recommendations or engineering analysis for each intended end use of the treated landfill gas.
   (3) Documentation of the monitoring methods and ranges, along with justification for their use.
   (4) List of responsible staff (by job title) for data collection.
   (5) Processes and methods used to collect the necessary data.
   (6) Description of the procedures and methods that are used for quality assurance, maintenance, and repair of all continuous monitoring systems (CMS).

[Rule 62-204.800(8), F.A.C. and Rule 62-204.800(11), F.A.C.; Rule 2.201, JEPB; 40 CFR 60.768(b)(1),(4) and (5), and 40 CFR 63.1983(b)(1), (b)(4) and (b)(5)]

A.39. Equipment Operating Parameters Records. Except as provided in 40 CFR 63.1981(d)(2), a permittee of a controlled landfill shall keep for 5 years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in **Specific Condition Nos. A.19, A.20., A.21., A.22 ., and A.23.** 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.

a. Each permittee shall keep up-to-date, readily accessible continuous records of the indication of flow to the control system and 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 40 CFR 63.1961(b)(2)(ii), (c)(2)(ii), and (g)(2).

b. The permittee of a landfill seeking to comply with **Specific Condition No. A.6.** using an active collection system designed in accordance with **Specific Condition No. A.6.a.** shall keep records of periods when the collection system or control device is not operating.
c. Where a permittee seeks to demonstrate compliance with the operational standard in 40 CFR 63.1958(e)(1) (see **Specific Condition No. A.10.e**) , the date, time, and duration of each startup and/or shutdown period, recording the periods when the affected source was subject to the standard applicable to startup and shutdown.
d. Where a permittee seeks to demonstrate compliance with the operational standard in 40 CFR 63.1958(e)(1) (see **Specific Condition No. A.10.e)**, in the event that an affected unit fails to meet an applicable standard, record the information below in this paragraph:
    (1) For each failure record the date, time and duration of each failure and the cause of such events (including unknown cause, if applicable).
    (2) For each failure to meet an applicable standard; record and retain a list of the affected sources or equipment.
    (3) Record actions taken to minimize emissions in accordance with the general duty of 40 CFR 63.1955(c) and any corrective actions taken to return the affected unit to its normal or usual manner of operation.
e. In lieu of the requirements specified in 40 CFR 63.8(d)(3) the permittee shall keep the written procedures required by 40 CFR 63.8(d)(2) on record for the life of the affected source or until the affected source is no longer subject to the provisions of 40 CFR Part 63, to be made available for inspection, upon request, by the Department. If the performance evaluation plan is revised, you shall keep previous (i.e., superseded) versions of the performance evaluation plan on record to be made available for inspection, upon request, by the Department, for a period of 5 years after each revision to the plan. The program of corrective action should be included in the plan required under 40 CFR 63.8(d)(2).

[Rule 62-204.800(8), F.A.C. and Rule 62-204.800(11), F.A.C.; Rule 2.201, JEPB; 40 CFR 63.1983(c)(2), (c)(5), (c)(6), (c)(7), (c)(8) and 40 CFR 60.768(c)(2), (c)(5), (c)(6,), (c)(7), (c)(8)]

A.40. Plot Plan Records. The permittee for the life of the collection system shall keep 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.
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 **Specific Condition No. A.12 above**.
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 **Specific Condition No. A.9.a(3)(a) above** as well as any nonproductive areas excluded from collection as provided in **Specific Condition No. A.9.a(3)(b) above**.

[Rule 62-204.800(8), F.A.C., Rule 62-204.800(11), F.A.C.; Rule 2.201, JEPB; 40 CFR 60.768(d) and 40 CFR 63.1983(d)]

A.41. Collection and Control System Records. Except as provided in 40 CFR 63.1981(d)(2), the permittee shall keep for at least five years up-to-date, readily accessible records of the following:
a. All collection and control system exceedances of the operational standards in **Specific Condition No. A.10 above**, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.
b. The permittee shall also keep records of each wellhead temperature monitoring value of 55 degrees Celsius (131 degrees Fahrenheit) or above, each wellhead nitrogen level at or above 20 percent, and each wellhead oxygen level at or above five percent, except:
    (1) When a permittee seeks to demonstrate compliance with the compliance provisions for wellhead temperature in 40 CFR 63.1958(c)(1) (see **Specific Condition No. A.10.c**), the records of each wellhead temperature monitoring value of 62.8°C (145°F) or above instead of values greater than 55°C (131°F).

(2) Each permittee required to conduct the enhanced monitoring provisions in 40 CFR 63.1961(a)(5), shall also keep records of all enhanced monitoring activities.
(3) Each permittee required to submit the 24-hour high temperature report in 40 CFR 63.1981(k), shall also keep a record of the email transmission.

c. For any root cause analysis for which corrective actions are required in **Specific Condition No. A.11.c.(1) or (1) above**, keep a record of the root cause analysis conducted, including a description of the recommended corrective action(s) taken, and the date(s) the corrective action(s) were completed.

d. For any root cause analysis for which corrective actions are required in **Specific Condition Nos. A.11.c.(2) or d(2) above**, keep a record of the root cause analysis conducted, the corrective action analysis, the date for corrective action(s) already completed following the positive pressure reading or high temperature reading, and, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates.

e. For any root cause analysis for which corrective actions are required in **Specific Condition Nos. A.11.c.(3) or d.(3) above**, keep a record of the root cause analysis conducted, the corrective action analysis, the date for corrective action(s) already completed following the positive pressure reading or high temperature reading, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates, and a copy of any comments or final approval on the corrective action analysis or schedule from the regulatory agency.

[Rule 62-204.800(8), F.A.C., Rule 62-204.800(11), F.A.C.; Rule 2.201, JEPB; 40 CFR 60.768(e) and 40 CFR 63.1983(e)]

A.42. Collection and Control System Monitoring Records. The permittee shall keep for at least five years up-to-date, readily accessible records of all collection and control system monitoring data for parameters measured in **Specific Condition No. A.19 above**. [Rule 62-204.800(8), F.A.C., Rule 62-204.800(11), F.A.C.; 40 CFR 60.768(h) and 40 CFR 63.1983(g); and Rule 2.201, JEPB]

A.43. Electronic Format Records. Any records required to be maintained by 40 CFR 60, Subpart XXX that are submitted electronically via the EPA's CDX may be maintained in electronic format. [Rule 62-204.800(8), F.A.C.; Rule 2.201, JEPB; 40 CFR 60.768(i)]

A.44. Operational Interior Wellhead Records. Where a permittee seeks to demonstrate compliance with the operational standard for temperature in 40 CFR 63.1958(c)(1) (see **Specific Condition No. A.10.c**), the permittee shall keep the following records.

(1) Records of the landfill gas temperature on a monthly basis as monitored in 40 CFR 63.1960(a)(4).
(2) Records of enhanced monitoring data at each well with a measurement of landfill gas temperature greater than 62.8˚C (145˚F) as gathered in 40 CFR 63.1961(a)(5) and (6).
(3) Any records required to be maintained by 40 CFR 63, Subpart AAAA that are submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation.

[Rule 62-204.800(11), F.A.C.; Rule 2.201, JEPB; 40 CFR 63.1983(h)]

A.45. Asbestos Records and Reports. The permittee shall maintain records and reports in accordance with 40 CFR 61.154(e) for a period of at least five years. [Rule 62-204.800(10), F.A.C.; Rule 2.201, JEPB; 40 CFR 61.154(e)]

A.46. Asbestos Location Records. The permittee shall maintain, until closure, location records of the asbestos containing waste subject to 40 CFR 61.154 in accordance with 40 CFR 61.154(f). [Rule 62-204.800(10), F.A.C.; Rule 2.201, JEPB; and, 40 CFR 61.154(f)]

Other Requirements

A.47. Implementation and Enforcement of 40 CFR 63, Subpart AAAA.

a. 40 CFR 63, Subpart AAAA can be implemented and enforced by the U.S. EPA, , or a delegated authority such as the applicable State, local, or tribal agency. Because the EPA Administrator has delegated authority to the State, the state as well as the U.S. EPA has the authority to implement and enforce this subpart.

b. In delegating implementation and enforcement authority of this subpart to the State under Subpart E of 40 CFR 63, the following authorities are retained by the EPA Administrator and are not transferred to the State: Approval of alternatives to the standards in 40 CFR 63.1955. Where these standards reference another subpart, the cited provisions will be delegated according to the delegation provisions of the referenced subpart.

[Rule 62-204.800(11), F.A.C.; Rule 2.201, JEPB; and, 40 CFR 63.1985]

A.48. 40 CFR 60, Subpart A – General Provisions. In addition to the above requirements, the permittee shall also comply with the requirements contained in 40 CFR 60, Subpart A - General Provisions. [Rule 62-213.440, F.A.C.; Rule 2.501, JEPB; and, 40 CFR 60, Subpart A]

A.49. 40 CFR 61, Subpart A – General Provisions. In addition to the above requirements, the permittee shall also comply with the requirements contained in 40 CFR 61, Subpart A - General Provisions. [Rule 62-213.440, F.A.C.; Rule 2.501, JEPB; and, 40 CFR 61, Subpart A]

A.50. 40 CFR 63, Subpart A – General Provisions. In addition to the above requirements, the permittee shall also comply with the requirements contained in 40 CFR 63, Subpart A - General Provisions. [Rule 62-213.440, F.A.C.; and Rule 2.501, JEPB]

Part 63 citation	Description	Applicable to subpart AAAA	Explanation
63.1(a)	Applicability: General applicability of NESHAP in this part	Yes	
63.1(b)	Applicability determination for stationary sources	Yes	
63.1(c)	Applicability after a standard has been set	Yes	
63.1(e)	Applicability of permit program before relevant standard is set	Yes	
63.2	Definitions	Yes	
63.3	Units and abbreviations	Yes	
63.4	Prohibited activities and circumvention	Yes	
63.5(a)	Construction/reconstruction	Yes	
63.5(b)	Requirements for existing, newly constructed, and reconstructed sources	Yes	
63.5(d)	Application for approval of construction or reconstruction	Yes	
63.5(e) and (f)	Approval of construction and reconstruction	Yes	
63.6(a)	Compliance with standards and maintenance requirements - applicability	Yes	
63.6(b) and (c)	Compliance dates for new, reconstructed, and existing sources	Yes	
63.6(e)(1)(i)-(ii)	Operation and maintenance requirements	No	See 63.1955(c) for general duty requirements.
63.6(e)(3)(i)-(ix)	SSM plan	No	
63.6(f)(1)	Exemption of nonopacity emission standards during SSM	No	

Part 63 citation	Description	Applicable to subpart AAAA	Explanation
63.6(f)(2) and (3)	Compliance with nonopacity emission standards	Yes	
63.6(g)	Use of an alternative nonopacity standard	Yes	
63.6(h)	Compliance with opacity and visible emission standards	No	Subpart AAAA does not prescribe opacity or visible emission standards.
63.6(i)	Extension of compliance with emission standards	Yes	
63.6(j)	Exemption from compliance with emission standards	Yes	
63.7	Performance testing	Yes	
63.7(e)(1)	Conditions for performing performance tests	No	40 CFR 63.1959(f) specifies the conditions for performing performance tests.
63.8(a) and (b)	Monitoring requirements - Applicability and conduct of monitoring	Yes	
63.8(c)(1)	Operation and Maintenance of continuous emissions monitoring system	Yes	
63.8(c)(1)(i)	Operation and Maintenance Requirements	No	Unnecessary due to the requirements of 63.8(c)(1) and the requirements for a quality control plan for monitoring equipment in 63.8(d)(2).
63.8(c)(1)(ii)	Operation and Maintenance Requirements	No	
63.8(c)(1)(iii)	SSM plan for monitors	No	
63.8(c)(2)-(8)	Monitoring requirements	Yes	
63.8(d)(1)	Quality control for monitors	Yes	
63.8(d)(2)	Quality control for monitors	Yes	
63.8(d)(3)	Quality control records	No	See 63.1983(c)(8).
63.9(a), (c), and (d)	Notifications	Yes	
63.9(b)	Initial notifications	Yes[2]	
63.9(e)	Notification of performance test	Yes[2]	
63.9(f)	Notification of visible emissions/opacity test	No	Subpart AAAA does not prescribe opacity or visible emission standards.
63.9(g)	Notification when using CMS	Yes[2]	
63.9(h)	Notification of compliance status	Yes[2]	
63.9(i)	Adjustment of submittal deadlines	Yes	
63.9(j)	Change in information already provided	Yes	
63.10(a)	Recordkeeping and reporting - general	Yes	
63.10(b)(1)	General recordkeeping	Yes	
63.10(b)(2)(i)	Startup and shutdown records	No	See 63.1983(c)(6) for recordkeeping for periods of startup and shutdown.
63.10(b)(2)(ii)	Recordkeeping of failures to meet a standard	No	See 63.1983(c)(6)-(7) for recordkeeping for any exceedance of a standard.
63.10(b)(2)(iii)	Recordkeeping of maintenance on air pollution control equipment	Yes	
63.10(b)(2)(iv)-	Actions taken to minimize emissions	No	See 63.1983(c)(7) for

Part 63 citation	Description	Applicable to subpart AAAA	Explanation
(v)	during SSM		recordkeeping of corrective actions to restore compliance.
63.10(b)(2)(vi)	Recordkeeping for CMS malfunctions	Yes	
63.10(b)(2)(vii)-(xiv)	Other Recordkeeping of compliance measurements	Yes	
63.10(c)	Additional recordkeeping for sources with CMS	No	See 63.1983 for required CMS recordkeeping.
63.10(d)(1)	General reporting	Yes	
63.10(d)(2)	Reporting of performance test results	Yes	
63.10(d)(3)	Reporting of visible emission observations	No	
63.10(d)(4)	Progress reports for compliance date extensions	Yes	
63.10(d)(5)	SSM reporting	No	All exceedances shall be reported in the semi-annual report required by 63.1981(h).
63.10(e)	Additional reporting for CMS systems	Yes	
63.10(f)	Recordkeeping/reporting waiver	Yes	
63.11	Control device requirements/flares	Yes	60.18 is required before September 27, 2021. However, 60.18 and 63.11 are equivalent.
63.12(a)	State authority	Yes	
63.12(b)-(c)	State delegations	Yes	
63.13	Addresses	Yes	
63.14	Incorporation by reference	Yes	
63.15	Availability of information and confidentiality	Yes	

[1] Before September 28, 2021, this subpart requires affected facilities to follow 40 CFR part 60, subpart WWW, which incorporates the General Provisions of 40 CFR part 60.
[2] If an owner or operator has complied with requirements that are parallel to the requirements of the part 63 citation of this table under 40 CFR part 60, subpart WWW or subpart XXX, or a state or federal plan that implements 40 CFR part 60, subpart Cc or Cf, then additional notification for that requirement is not required.

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
010	5,000 SCFM Open, Non-assisted Flare

The 5,000 scfm open, non-assisted Flare (manufactured by Parnel Biogas, Inc). The flare is equipped with a temperature monitoring system manufactured by Yokagawa, that records temperature, flare on and off time and blower run time. The flare is equipped with two centrifugal exhaust landfill gas blowers with a maximum design of 2,500 cfm each. The flare has a stack height of 51 feet with an exit diameter of 14 inches. The outlet gas temperature is typically 1,200°F in the combustion zone. The maximum LFG flow rate is 5,000 scfm and the minimum flow rate is 500 scfm. The starter fuel type is propane. The flare has a destruction efficiency of 98% NMOCs @ CH_4 content of 40-60%.

Trail Ridge Landfill became subject to 40 CFR 60, NSPS Subpart XXX when construction on new cells began on May 18, 2015.

{Permitting Note: This emissions units are regulated under 40 CFR 60, Subpart A, the General Control Device and Work Practice Requirements adopted in Rule 62.204.800(8)(b), F.A.C., 40 CFR 60, Subpart XXX, "Standards of Performance for Municipal Solid Waste Landfills that Commenced Construction, Reconstruction, or Modification after July 17, 2014, adopted and incorporated by reference in Rule 62-204.800(8)(b), F.A.C., 40 CFR 63, Subpart A, adopted and incorporated by reference in Rule 62-204.800(11)(d)1.,F.A.C.; and 40 CFR 63, Subpart AAAA, adopted and incorporated by reference in Rule 62-204.800(11)(b)59., F.A.C.}

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity – Flare. The maximum landfill gas flowrate shall not exceed 5,000 cubic feet per minute of landfill gas. [Rule 62-210.200(PTE), F.A.C.; Rule 2.301, JEPB; and; Permit No. 0310358-005-AC]

B.2. Hours of Operation – Flare. This emissions unit may operate continuously without restriction. [Rule 62-210.200(PTE), F.A.C.; Rule 2.301, JEPB; and, Permit No. 0310358-005-AC]

B.3. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(3), F.A.C.; Rule 2.1201, JEPB]

Control Technology

B.4. Open Flare. Operation:

a. The flare shall be operated at all times when emissions may be vented to it. [40 CFR 60.18(e)]
b. The flare control system shall be operated according to the following provisions. Route all the collected gas to a control system that complies with the following requirements. A non-enclosed flare designed and operated in accordance with the parameters established in 40 CFR 60.18 except as noted in **paragraph c.** below. [Rule 62-204.800(8), F.A.C.; Rule 2.201, JEPB; 40 CFR 60.762(b)(2) and 40 CFR 60.762(b)(2)(iii)]
c. The non-enclosed flare shall be designed and operated in accordance with the parameters established in 40 CFR 60.18 (see **Specific Condition Nos. B.4.d, B.7., B.8., B.9., and B.13.**) except for the performance test required, where the net heating value of the combusted landfill gas shall be calculated from the concentration of methane in the landfill gas as measured by Method 3C. [Rule 62-204.800(8), F.A.C.; Rule 2.201, JEPB; 40 CFR 60.762(b)(2)(iii)(A) and 40 CFR 60.764(e)]
d. The flare shall operate at all times when the collected gas (delivered by the gas collection system regulated in Subsection A) is routed to the system. [Rule 62-204.800(8), F.A.C.; Rule 62-204.800(11), F.A.C.; Rule 2.201, JEPB; 40 CFR 60.763(f), 40 CFR 60.18(e) and 40 CFR 63.1965(f)]

Method Of Operation

B.5. Method of Operation. All LFG collected by the gas collection system shall be directed to the landfill gas treatment system for subsequent use as fuel at the Trail Ridge Energy LLC, Trail Ridge Energy Facility. Any excess landfill gas that exceeds the volume the Trail Ridge Energy LLC, Trail Ridge Energy Facility is able to accept shall be diverted to the 5,000 scfm open flare for control. Collected LFG shall not be vented to the atmosphere. [Rules 62-4.160(2), 62-4.070(3), and 62-210.200(PTE), F.A.C.; Rule2.1401, JEPB, Rule 2.301, JEPB; 40 CFR 60.762(b)(2)(iii)(A), 40 CFR 60.762(b)(2)(iii)(C), and 40 CFR 60.763(e); and, Permit No. 0310358-004-AC/PSD-FL-374]

B.6. Method of Operation – Flare Pilot Fuel. The flare shall fire propane gas as its pilot fuel. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Rule2.1401, JEPB, Rule 2.301, JEPB]

Operational Requirements

B.7. Control Device Requirements.

a. *Flare Opacity Limit*: See **Specific Condition No. B.13.**
b. Flares shall be operated with a flame present at all times, as determined by the methods specified in **Specific Condition Nos. B.7.(2), B.7.(3), B.7.(4), B.9., and B.13.** [40 CFR 60.18(c)(2)]
c. The permittee shall operate the flare to comply with the heat content specifications and the maximum tip velocity specifications that are:
   (1) The net heating value of the gas being combusted shall be 7.45 MJ/scm (200 Btu/scf) or greater if the flare is non-assisted. [Rule 62-204.800(8), F.A.C.; Rule 2.201, JEPB; 40 CFR 60.18(c)(3), (c)(3)(ii)]
   (2) The net heating value of the gas being combusted shall be calculated using the following equation:

$$H_T = K \sum_{i=1}^{n} C_i H_i$$

Where:

H_T = Net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25 °C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 °C;

$$K = 1.740 \times 10^{-7} \left(\frac{1}{ppm}\right)\left(\frac{g\,mole}{scm}\right)\left(\frac{MJ}{kcal}\right) at\ std\ T\ for\ \left(\frac{g\,mole}{scm}\right)\ of\ 20^oC$$

C_i = Concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 and measured for hydrogen and carbon monoxide by ASTM D1946-77 or 90 (Reapproved 1994) (Incorporated by reference as specified in 40 CFR 60.17); and

H_i = Net heat of combustion of sample component i, kcal/g mole at 25 °C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 or 88 or D4809-95 (incorporated by reference as specified in 40 CFR 60.17) if published values are not available or cannot be calculated.

[Rule 62-204.800(8), F.A.C.; Rule 2.201, JEPB; 40 CFR 60.18(c)(3), (c)(3)(ii), 40 CFR 60.18(f)(3)]

{*Permitting Note: The only gas component, C_i, allowed for purposes of the performance test calculation is CH_4 per 40 CFR 60.764(e).*}

   (3) The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip. [Rule 62-204.800(8), F.A.C.; Rule 2.201, JEPB; 40 CFR 60.18(f)(4)]
   (4) The non-assisted flare shall be designed to operate with an exit velocity that is either:
      (a) less than 18.3 m/sec (60 ft/sec),

(b) equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec) are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).

(c) less than the velocity, V_{max}, as determined below, and less than 122 m/sec (400 ft/sec) are allowed where the maximum permitted velocity, V_{max}, for flares shall be determined by the following equation.

$Log_{10} (V_{max}) = (H_T\ 28.8)/31.7$

V_{max} = Maximum permitted velocity, m/sec
H_T = Net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25 °C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 °C;
28.8 = Constant
31.7 = Constant

[Rule 62-204.800(8), F.A.C.; Rule 2.201, JEPB; and, 40 CFR 60.18(c)(4) and (f)(5)]

*{Permitting Note: Required performance testing for **paragraph B.7c.(3) above** has been completed.}*

B.8. General Control Device and Work Practice Requirements. Permittees of flares used to comply with the provisions of 40 CFR 60 shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. Applicable subparts of 40 CFR 60 will provide provisions stating how permittees of flares shall monitor these control devices. [Rule 62-204.800(8), F.A.C.; Rule 2.201, JEPB; and, 40 CFR 60.18(d)]

{Permitting Note: This flare is non-assisted. Only condition requirements for non-assisted flares apply.}

B.9. Flare pilot flame. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame. [Rule 62-204.800(8), F.A.C.; Rule 2.201, JEPB; and, 40 CFR 60.18(f)(2)]

Operational Standards

B.10. Operational Standard for Control Device. Operate the system such that all collected gases are vented to a control system designed and operated in compliance with **Specific Condition No. B.4.b. and c.** In the event the collection or control system is not operating, 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 of the collection or control system not operating. [Rule 62-204.800(8), F.A.C.; Rule 2.201, JEPB ; and 40 CFR 60.763(e)]

B.11. Operational Standard for Control Device. Operate the control system at all times when the collected gas is routed to the system. [Rule 62-204.800(8), F.A.C.; Rule 2.201, JEPB; and, 40 CFR 60.763(f)]

B.12. Operation. Operate the control device installed to comply with 40 CFR 60, NSPS Subpart XXX in accordance with the provisions of **Specific Condition Nos. B.4.d.**, **B.10.**, **B.11.**, **B.15.**, **B.16. (**40 CFR 60.763, 60.765, and 60.766). [Rule 62-204.800(8), F.A.C.; Rule 2.201, JEPB; and, 40 CFR 60.762(b)(2)(iv)]

Emission Limitations and Standards

Unless otherwise specified, the averaging time for **Specific Condition No. B.13.** is based on the specified averaging time of the applicable test method.

B.13. Visible Emissions. No visible emissions shall be observed except for periods not to exceed 5 minutes during any two consecutive hours. The observation period is 2 hours and shall be used according to Method 22. The observation period may be shorter if approved by the Department. [Rule 62-204.800(8), F.A.C.; Rule 2.201, JEPB; and, 40 CFR 60.18(c)(1) and (f)(1)]

Compliance Provisions

B.14. Startup – Shutdown – Malfunction (SSM). The provisions of this subpart apply at all times, including periods of SSM. During periods of SSM, the permittee shall comply with the work practice specified in 40 CFR 60.763(e) (see **Specific Condition No. B.10.**). [Rule 62-204.800(8), F.A.C.; Rule 2.201, JEPB; and, 40 CFR 60.765(e)]

Monitoring of Operations

B.15. Flare flame, flow, bypass. Each permittee seeking to comply with **Specific Condition Nos. B.4.b. and c above** using non-enclosed flare shall install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment:

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.

b. A device that records flow to the flare and bypass of the flare (if applicable). The permittee shall:

(1) Install, calibrate, and maintain a gas flow rate measuring device that records the flow to the control device at least every 15 minutes; and

(2) 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.

[Rule 62-204.800(11), F.A.C.; Rule 2.201, JEPB; and, 40 CFR 63.1961(c)]

{Permitting Note: The flare is not equipped with a bypass system.}

B.16. Monitoring requirements. The monitoring requirements of **Specific Condition No.** Error! Reference source not found. applies at all times the affected source is operating, except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. The permittee is required to complete monitoring system repairs in response to monitoring system malfunctions and to return the monitoring system to operation as expeditiously as practicable. [Rule 62-204.800(11), F.A.C.; Rule 2.201, JEPB; and, 40 CFR 63.1961(h)]

Test Methods and Procedures

B.17. Test Methods. When required, tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
3C	Determination of Carbon Dioxide, Methane, Nitrogen, and Oxygen from Stationary Sources
22	Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-204.800, F.A.C.; and Rule 2.201, JEPB]

B.18. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.; and Rule 2.1201, JEPB]

{Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to http://www.fldepportal.com/go/home and sign in (or

register if you're a new user) from the link in the upper right corner of the page. On the Welcome page select the Submit option, then select Registration/Notification, and then click on Air Compliance Test Notifications. Once in the process, just carefully read the instructions on each screen (and under the Help tabs) to complete the notification.}

B.19. Annual Compliance Tests Required. During each calendar year (January 1st to December 31st), the emission unit shall be tested to demonstrate compliance with the emissions standards for opacity in **Specific Condition No. B.13 above**. The observation period is two hours and shall be used according to Method 22. [Rule 62-297.310(8), F.A.C.; and Rule 2.1201, JEPB]

{Permitting Note: Required testing not required in calendar years in which the flare did not operate.}

B.20. Additional Compliance Test Requirements. For the performance test required in **Specific Condition No. B.4.c above**, the net heating value of the combusted landfill gas as determined in **Specific Condition No. B.7.c.(2) above**, 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 40 CFR 60.18(f)(4), see **Specific Condition No. B.7.c.(3) above**Error! Reference source not found.. [Rule 62-204.800(8), F.A.C.; Rule 2.201, JEPB; and, 40 CFR 60.764(e) & 40 CFR 63.1959(e)]

Recordkeeping and Reporting Requirements

B.21. Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Condition(s)
Performance Test	Within 45 days following completion of a performance test	**B.23.**
Notice of Equipment Removal	30 days prior to removal or cessation	**B.24**
Semi-annual Reports	60 days after the end of the semi-annual period	**B.25**
Electronic Reporting	Within 60 days following completion of a performance test	**B.26.**

[Rule 62-213.440(1)(b), F.A.C.; and Rule 2.501, JEPB]

B.22. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.; and Rule 2.501, JEPB]

B.23. Performance Testing Reporting Requirements. Within 60 days after the date of completing each performance test (as defined in 40 CFR 60.8), the permittee shall submit the results of the performance tests, including any associated fuel analyses, required by **Specific Condition No. B.20.** according to **Specific Condition No. B.26.a.** [Rule 62-204.800(8), F.A.C.; Rule 2.201, JEPB; and, 40 CFR 60.764(e)(1)]

B.24. Equipment Removal Reporting Requirement. The permittee of a controlled landfill shall submit an equipment removal report to the Department 30 days prior to removal or cessation of operation of the control equipment.

a. The equipment removal report shall contain all of the following items:
   (1) A copy of the closure report;
   (2) A copy of the initial performance test report demonstrating that the 15-year minimum control period has expired, unless the report of the results of the performance test has been submitted to the EPA via the EPA's CDX, or information that demonstrates that the GCCS will be unable to operate for 15 years due to declining gas flows. In the equipment removal report, the process unit tested, the pollutants tested, and the date that such performance test was conducted may be submitted in lieu of the performance test report if the report has been previously submitted to the EPA's CDX; and

(3) Dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 34 megagrams or greater of NMOC per year, unless the NMOC emission rate reports have been submitted to the EPA via the EPA's CDX. If the NMOC emission rate reports have been previously submitted to the EPA's CDX, a statement that the NMOC emission rate reports have been submitted electronically and the dates that the reports were submitted to the EPA's CDX may be submitted in the equipment removal report in lieu of the NMOC emission rate reports.

b. The Department may request such additional information as may be necessary to verify that all of the conditions for removal in **Specific Condition No. A.6.d above** have been met.

[Rule 62-204.800(8), F.A.C.; Rule 62-204.800(11), F.A.C.; Rule 2.201, JEPB; and, 40 CFR 60.767(f) and 40 CFR 63.1981(g)]

B.25. Semi-annual Reports. The permittee shall submit to the Department, following the procedure specified in Electronic Reporting of **Specific Condition No. B.26 below**, semi-annual reports of the recorded information below. For enclosed combustion devices and flares, reportable exceedances are defined under 40 CFR 63.1983(c).

a. Value and length of time for exceedance of applicable parameters monitored under **Specific Condition No. B.15 above**.

b. Description and duration of all periods when the gas stream was diverted from the control device or treatment system through a bypass line or the indication of bypass flow as specified under **Specific Condition No.** Error! Reference source not found.**.**

c. Description and duration of all periods when the control device or treatment system was not operating and length of time the control device or treatment system was not operating.

[Rule 62-204.800(8), F.A.C.; Rule 2.201, JEPB; and, 40 CFR 60.767(g)(1), (2),(3), 40 CFR 63.1981(h)]

{Permitting Note: It is 40 CFR 63.1981(h) that requires the NSPS Subpart XXX reports be submitted semi-annually.}

B.26. Electronic Reporting. The permittee shall submit reports electronically according to the following:

a. Within 60 days after the date of completing each performance test required by this subpart, you shall submit the results of the performance test following the procedures in paragraphs (1) – (3) below:

(1) Data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (*https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert*) at the time of the test. Submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through the EPA's CDX (*https://cdx.epa.gov/*). The data shall be submitted in a file format generated through the use of the EPA's ERT. Alternatively, you may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website.

(2) Data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test. The results of the performance test shall be included as an attachment in the ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the ERT generated package or alternative file to the EPA via CEDRI.

(3) Confidential business information (CBI). If you claim some of the information submitted under 40 CFR 63.1981(a) is CBI, you shall submit a complete file, including information claimed to be CBI, to the EPA. The file shall be generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the file on a compact disc, flash drive, or other commonly used electronic storage medium and clearly mark the medium as CBI. Mail the electronic medium to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted shall be submitted to the EPA via the EPA's CDX as described in **paragraph a.(1) of this Specific Condition.**

b. Each permittee required to submit reports following the procedure specified in this paragraph shall submit reports to the EPA via CEDRI. CEDRI can be accessed through the EPA's CDX. The permittee shall use the appropriate electronic report in CEDRI for 40 CFR 63, Subpart AAAA or an alternate electronic file format consistent with the XML schema listed on the CEDRI website (*https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri*). Once the spreadsheet template upload/forms for the reports have been available in CEDRI for 90 days, the permittee shall begin submitting all subsequent reports via CEDRI. The reports shall be submitted by the deadlines specified in this subpart, regardless of the method in which the reports are submitted. The NMOC emission rate reports, semi-annual reports, and bioreactor 40-percent moisture reports should be electronically reported as a spreadsheet template upload/form to CEDRI. If the reporting forms specific to this subpart are not available in CEDRI at the time that the reports are due, the permittee shall submit the reports to the Administrator at the appropriate address listed in 40 CFR 63.13d.

[Rule 62-204.800(8), F.A.C. and Rule 62-204.800(11), F.A.C.; Rule 2.201, JEPB; 40 CFR 63.1981(l) and 40 CFR 60.767(i)]

{Permitting note: Semi-annual reports submitted electronically to US EPA shall also be sent to the Compliance Authority

B.27. Flare Records. Except as provided in **Specific Condition No. B.24 above**, the permittee of the controlled landfill shall keep up-to-date, readily accessible records for the life of the control system equipment of the data listed below 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.

The permittee shall keep records of 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 40 CFR 60.18 (see **Specific Condition Nos. B.4.a., B.7., B.8., B.13 and B.9.**)Error! Reference source not found., 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. [Rule 62-204.800(8), F.A.C.; and Rule 2.201, JEPB; 40 CFR 60.768(b) and (b)(4), 40 CFR 63.1983(b)(4)]

B.28. Flare Operation Parameter Records. Except as provided in 40 CFR 60.767(c)(2), (see **Specific Condition No. B.24.)**, the permittee of a controlled landfill shall keep for five years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in **Specific Condition Nos. B.15. and B.16.**, 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.

a. Each permittee shall keep up-to-date, readily accessible continuous records of the indication of flow to the control system and 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 **Specific Condition Nos. B.15. and B.16.**
b. Each permittee using a non-enclosed flare shall keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified under **Specific Condition No.B.15 above**, and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent.
c. Each permittee shall keep records of periods when the collection system or control device is not operating.

[Rule 62-204.800(8), F.A.C.; Rule 2.201, JEPB; and, 40 CFR 60.768(c), (c)(2), (c)(4), and (c)(5)]

B.29. Exceedance records. Except as provided for in **Specific Condition No. B.24 above.**, each permittee subject to the provisions of 40 CFR 60 Subpart XXX shall keep for at least 5 years up-to-date, readily accessible records of all control system exceedances of the operational standards in **Specific Condition Nos. B.10. and B.11.**, the reading in the subsequent month whether or not the second reading is an exceedance, and

the location of each exceedance. [Rule 62-204.800(8), F.A.C.; Rule 2.201, JEPB; and, 40 CFR 60.768(e) and (e)(1)]

B.30. Recordkeeping format. Any records required to be maintained by 40 CFR Subpart XXX that are submitted electronically via the EPA's CDX may be maintained in electronic format. [Rule 62-204.800(8), F.A.C.; Rule 2.201, JEPB; and, 40 CFR 60.768(i)]

The specific conditions in this condition apply to the following emissions units:

EU No.	Brief Description
016	Emergency Diesel Generator (Scalehouse)
017	Emergency Diesel Generator (Shop)

Emissions Unit 016 is a 135 brake horsepower, Model 6BT59-G2, Cummins Diesel Generator used to provide power during outages. This engine was manufactured in 1992. The engine is subject to the requirements of 40 CFR 63, Subpart ZZZZ and is classified as an existing, emergency CI engine, by the subpart.

Emissions Unit 017 is a 465 brake horsepower, Model WA555-92, Cummins Diesel Generator used to provide power during outages. This engine was manufactured in 1992. The engine is subject to the requirements of 40 CFR 63, Subpart ZZZZ and is classified as an existing, emergency CI engine, by the subpart.

{Permitting Note: These emissions units, compression ignition (CI) engines, are regulated under 40 CFR 63, Subpart ZZZZ, NESHAP for Stationary RICE adopted in Rule 62.204.800(11)(b), F.A.C. This RICE is for emergency engines. This permit section addresses an "existing" stationary CI RICE less than or equal to 500 HP that is located at a Major source of HAPs and that has not been modified or reconstructed after 6/12/2006. If the RICE is modified or reconstructed after 7/11/2005, the NSPS 40 CFR 60, Subpart IIII, will then apply.

Essential Potential to Emit (PTE) Parameters

C.1. Engine Startup. During periods of startup the permittee shall minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for the appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices. [Rule 62-204.800(11), F.A.C.; Rule 2.201, JEPB; and, 40 CFR 63.6625(h); Table 2.c.1.]

C.2. Work or Management Practice Standards.

a. *Oil*. Change oil and filter every 500 hours of operation or 1 year + 30 days of the previous change, whichever comes first. Sources have the option to utilize an oil analysis program as described in 40 CFR 63.6625(i) in order to extend the specified oil change requirement.

b. *Air Cleaner*. Inspect air cleaner every 1,000 hours of operation or 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary.

c. *Hoses and Belts*. Inspect all hoses and belts every 500 hours of operation or 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary. Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

d. *Operation and Maintenance*. Operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop and follow your own maintenance plan which shall provide, to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution, control practice for minimizing emissions.

e. *Oil Analysis*. The permittee has the option of using oil analysis program in order to extend the specified oil and filter change requirement in **Specific Condition a above**. The oil analysis shall be performed at the same frequency specified for changing the oil and filter in **Specific Condition a above**. The analysis program shall at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine permittee is not required to change the oil and filter. If any of the limits are exceeded, the engine permittee shall change the oil and filter within two business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine permittee shall change the oil and filter within two

business days or before commencing operation, whichever is later. The permittee shall keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil and filter changes for the engine. The analysis program shall be part of the maintenance plan for the engine.
[Rules 62-204.800(11), F.A.C.; Rule 2.201, JEPB; 40 CFR 63.6602, 40 CFR 63.6625(e)(2) & (i), 40 CFR 63.6640(a), Tables 6.9.a. & 2.c.1.]

C.3. Hour Meter. The permittee of an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions shall install a non-resettable hour meter if one is not already installed. [Rule 62-204.800(11), F.A.C.; Rule 2.201, JEPB; and, 40 CFR 63.6625(f)]

Compliance Requirements

C.4. Continuous Compliance. The permittee shall:
a. Be in compliance with the emission limitations, operating limitations, and other requirements in 40 CFR 63 Subpart ZZZZ that apply at all times.
b. Operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
[Rule 62-204.800(11), F.A.C.; Rule 2.201, JEPB; and, 40 CFR 63.6605]

C.5. Demonstration of Continuous Compliance.
a. The permittee shall demonstrate continuous compliance with each emission limitation and operating limitation in Table 2c to 40 CFR 63, Subpart ZZZZ that applies according to methods specified in Table 6 of 40 CFR 63 Subpart ZZZZ.
b. The permittee shall report each instance in which they did not meet each emission limitation or operating limitation in Table 2c to 40 CFR 63 Subpart ZZZZ that applies. These instances are deviations from the emission and operating limitations in 40 CFR 63 Subpart ZZZZ. These deviations shall be reported according to the requirements in 40 CFR 63.6650. If the catalyst is changed, the permittee shall reestablish the values of the operating parameters measured during the initial performance test. When the operating parameters values are reestablished, the permittee shall also conduct a performance test to demonstrate that the required emission limitation applicable to the stationary RICE is being met.
c. The permittee shall also report each instance in which the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ that apply were not met.
d. The permittee shall operate the emergency stationary RICE according to the requirements in **paragraphs (1) through (3) below**. In order for the engine to be considered an emergency stationary RICE under 40 CFR 63 Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in **paragraphs (1) through (3) below**, is prohibited. If the permittee does not operate the engine according to the requirements in **paragraphs (1) through (3) below**, the engine will not be considered an emergency engine under 40 CFR 63 Subpart ZZZZ and shall meet all requirements for non-emergency engines.
(1) There is no time limit on the use of emergency stationary RICE in emergency situations.
(2) Emergency stationary RICE may be operated for maintenance checks and readiness testing as specified below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by **paragraph (3) below** counts as part of the 100 hours per calendar year allowed by this paragraph.
Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor,

the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

(3) Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in **paragraph (2) above** of this specific condition. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[Rule 62-204.800(11), F.A.C.; Rule 2.201, JEPB; and, 40 CFR 63.6640(a), (b), (e) & (f)(1), (2)(i), & (3)]

Recordkeeping and Reporting Requirements

C.6. Recordkeeping. The permittee shall keep the following records:

a. A copy of each notification and report submitted to comply with 40 CFR 63 Subpart ZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv) (See NESHAP Subpart A, General Provisions).
b. Records of the occurrence and duration (in hours) of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.
c. Records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii) (See NESHAP Subpart A, General Provisions).
d. Records of all required maintenance performed on the air pollution control and monitoring equipment.
e. Records of actions taken during periods of malfunction to minimize emissions in accordance with **Specific Condition No. C.4.b above**, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
f. Records required in Table 6 of 40 CFR 63 Subpart ZZZ to show continuous compliance with each emission or operating limitation that applies.

[Rule 62-204.800(11), F.A.C.; Rule 2.201, JEPB; and, 40 CFR 63.6655(a)(1)-(5), (d)]

C.7. Maintenance Records. The permittee shall keep records of the maintenance conducted on the stationary RICE in order to demonstrate that it and after-treatment control device (if any) is operated and maintained according to their own maintenance plan. [Rule 62-204.800(11), F.A.C.; Rule 2.201, JEPB; and, 40 CFR 63.6655(e),(e)(2)]

C.8. Hours of Operation Records. The permittee shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The permittee shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. [Rule 62-204.800(11), F.A.C.; Rule 2.201, JEPB; and, 40 CFR 63.6655(f), (f)(1)]

C.9. Reporting. If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Table 2c of 40 CFR 63 Subpart ZZZZ, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under Federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under Federal, state, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, state, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the Federal, state or local law under which the risk was deemed unacceptable.
[Rule 62-204.800(11), F.A.C.; Rule 2.201, JEPB; and, 40 CFR 63.6602 & Table 2c footnote 1]

C.10. Record Retention.

a. Records shall be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1).

b. As specified in 40 CFR 63.10(b)(1), the permittee shall keep each record for five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

c. The permittee shall keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1).

[Rule 62-204.800(11), F.A.C.; Rule 2.201, JEPB; and, 40 CFR 63.6660 & 40 CFR 63.10(b)(1)]