

Commonwealth of Kentucky
Division for Air Quality
STATEMENT OF BASIS / SUMMARY

Title V, Operating
Permit: V-26-016

Laurel Ridge Landfill, LLC
3612 East Highway 552
Lily, Kentucky 40740

May 28, 2026
Eric Amdahl, Reviewer

SOURCE ID: 21-125-00089
AGENCY INTEREST: 2581
ACTIVITY: APE20230003

Table of Contents

SECTION 1 – SOURCE DESCRIPTION 2
SECTION 2 – CURRENT APPLICATION AND EMISSION SUMMARY FORM..... 4
SECTION 3 – EMISSIONS, LIMITATIONS AND BASIS 6
SECTION 4 – SOURCE INFORMATION AND REQUIREMENTS 14
SECTION 5 – COMPLIANCE ASSURANCE MONITORING..... 16
SECTION 6 – PERMITTING HISTORY 17
SECTION 7 – PERMIT APPLICATION HISTORY 17
APPENDIX A – ABBREVIATIONS AND ACRONYMS 18
APPENDIX B – GCCS PLAN HISTORY AND REQUESTED ALTERNATIVES 19

SECTION 1 – SOURCE DESCRIPTION

SIC Code and description: 4953, Refuse Systems (solid waste landfill)

Single Source Det. Yes No If Yes, Affiliated Source AI: 178754

Source-wide Limit Yes No If Yes, See Section 4, Table A

28 Source Category Yes No If Yes, Category:

County: Laurel

Nonattainment Area N/A PM₁₀ PM_{2.5} CO NO_x SO₂ Ozone Lead

If yes, list Classification:

PTE* greater than 100 tpy for any criteria air pollutant Yes No

If yes, for what pollutant(s)?

PM₁₀ PM_{2.5} CO NO_x SO₂ VOC

PTE* greater than 250 tpy for any criteria air pollutant Yes No

If yes, for what pollutant(s)?

PM₁₀ PM_{2.5} CO NO_x SO₂ VOC

PTE* greater than 10 tpy for any single hazardous air pollutant (HAP) Yes No

If yes, list which pollutant(s):

PTE* greater than 25 tpy for combined HAP Yes No

*PTE does not include self-imposed emission limitations.

Description of Facility:

Laurel Ridge Landfill, LLC (Laurel Ridge Landfill) in Laurel County, Kentucky is a municipal solid waste (MSW) landfill that commenced construction in 1971 and was modified in 1995 and 2011. The landfill has a design capacity of 19,755,642 cubic yards (15,104,000 cubic meters) and a calculated emission rate of more than 50 megagrams per year of non-methane organic compounds (NMOC). The landfill installed a Gas Collection and Control System (GCCS) in 2003, and was required to operate it to comply with 40 CFR 60, Subpart WWW on December 10, 2003.

The landfill consists of Unit 1, which accepted waste from 1971 to 1983, Unit 2 which accepts construction demolition debris (CDD) waste only, Unit 3, which started accepting waste in 1995, and Unit 4, which started accepting waste in 2011.

The landfill has the ability to send the landfill gas to an open flare or the associated renewable natural gas (RNG) facility VRNG Laurel Ridge, LLC (AI 178754). The RNG plant processes raw landfill gas from the GCCS owned and operated by Laurel Ridge Landfill through membrane separation and adsorption processes to refine the methane concentration and remove contaminants to achieve pipeline-grade specifications for natural gas. The final product is injected into an existing natural gas pipeline.

The source is required to obtain a Title V permit by 401 KAR 52:020, Section 1(4) and 40 CFR 60.31f(c). The source includes a landfill and associated equipment including a Gas Collection and Control System (GCCS), flare, fuel (diesel) tank, haul roads, site construction, liquid waste solidification and leachate storage tanks.

In the absence of an approved state plan implementing 40 CFR Part 60, Subpart Cf, the landfill is subject to the federal plan under 40 CFR Part 62, Subpart OOO. Upon approval of Kentucky's state plan, the 40 CFR 60, Subpart Cf requirements implemented via 401 KAR 61:036 will apply in lieu of the federal plan.

SECTION 2 – CURRENT APPLICATION AND EMISSION SUMMARY FORM

Permit Number: V-26-016

Activities: APE20230003

Received: 7/28/2023

Application Complete Date(s): 9/24/2023

Permit Action: Initial Renewal Significant Rev Minor Rev Administrative

Construction/Modification Requested? Yes No NSR Applicable? Yes No

Previous 502(b)(10) or Off-Permit Changes incorporated with this permit action Yes No

Description of Action:

Laurel Ridge Landfill, LLC submitted an application to renew the current Title V permit. With this renewal, the following changes have been made:

- Emission calculations for the landfill and flare (EP 001 and 002) were updated to use the current version of AP-42, Chapter 2.4 (May 2025), as well as worst-case site specific data for H₂S.
- Updated permit language to be consistent and clear.
- Added the requirements of 40 CFR 60, Subpart Cf and 40 CFR 63, Subpart AAAA, while removing the requirements of 40 CFR 60, Subpart WWW, which are no longer applicable. The requirements from 40 CFR 60, Subpart Cf that are predicated on the approval of the state plan are included in Section I of the permit. The rest of the requirements are included in Section B and co-cited with the corresponding requirements from 40 CFR 63, Subpart AAAA where appropriate.

V-26-016 Emission Summary			
Pollutant	2025 Actual (tpy)³	PTE V-26-016 (tpy)²	Combined Facility PTE (tpy)^{1,5}
CO	25.0	104.3	106.1
NO _x	4.54	22.88	25.04
PT	63.6	5.65	5.82
PM ₁₀	31.1	5.65	5.82
PM _{2.5}	23.6	5.65	5.82
SO ₂	1.01	9.13	9.14
VOC	9.77	1.67	1.79
Lead	0.0	0.006	0.006
Greenhouse Gases (GHGs)			
Carbon Dioxide	15,612	67,446	70,0037
Methane	3,979	275.5	275.6
Nitrous Oxide	0.093	0.73	0.74
CO ₂ Equivalent (CO ₂ e)	127,049	75,354	77,949
Hazardous Air Pollutants (HAPs)			
Dichloromethane	0.24	1.16	1.16
Hexane	⁻⁴	0.55	0.60
Hydrochloric Acid	0.43	2.33	2.33
Tetrachloroethylene (PCE)	⁻⁴	0.60	0.60

V-26-016 Emission Summary			
Pollutant	2025 Actual (tpy)³	PTE V-26-016 (tpy)²	Combined Facility PTE (tpy)^{1, 5}
Toluene	1.25	3.49	3.49
Xylenes (Total)	0.45	1.24	1.24
Combined HAPs:	2.61	13.00	13.00

¹**Note:** The “combined facility PTE” includes both emissions from Laurel Ridge Landfill and VRNG Laurel Ridge, LLC. Because they are considered a “single source” their emissions must be counted together. The worst-case emissions for the combined facility PTE occur when the RNG facility does not operate and all landfill gas emissions are destroyed in Laurel Ridge Landfill’s flare. Therefore, the flare and RNG plant at VRNG are not counted toward the combined facility PTE because the landfill can only generate a set quantity of gas.

²**Note:** This is the individual PTE for Laurel Ridge Landfill that does not include VRNG Laurel Ridge.

³**Note:** The actual reported emissions include emissions from fugitive sources not otherwise counted toward the Title V PTE.

⁴**Note:** Pollutant is not currently tracked in EIS.

⁵**Note:** Emissions of VOC and most HAPs are controlled by the flare or the thermal oxidizer. The permittee must control emissions at all times.

SECTION 3 – EMISSIONS, LIMITATIONS AND BASIS

Emission Unit 002 - Municipal Solid Waste (MSW) Landfill

Initial Construction and Modification Date: 1971, modified 1995 & 2011

Process Description:

A MSW landfill that has accepted waste since November 8, 1987, commenced construction, reconstruction, or modification before July 17, 2014, having a design capacity equal to or greater than 2.5 million megagrams by mass or 2.5 million cubic meters by volume, and an NMOC emission rate (Calculated according to 40 CFR 63.1959) greater than 50 Mg/yr.

This landfill installed a Gas Collection and Control System (GCCS) in 2003. The landfill initially submitted a GCCS Plan for approval in June 2002, after the landfill exceeded the 50 Mg/yr threshold, and became subject to the requirement to install and operate a GCCS according to 40 CFR 60, Subpart WWW. The landfill submitted a revised plan in February 2003, and a well addition update in 2017. The system may send gas to EU001 or to the adjacent VRNG Laurel Ridge, LLC (AI 178754) facility. The updated GCCS plan was approved by the Division on September 13, 2017.

The landfill consists of Unit 1, which accepted waste from 1971 to 1983, Unit 2 which accepts construction demolition debris (CDD) waste only, Unit 3, which started accepting waste in 1995, and Unit 4, which started accepting waste in 2011.

Permitted Design Capacity: 19,755,642 cubic yards (15,104,000 cubic meters) / 13,450,000 Mg

Applicable Regulations:

401 KAR 53:010, *Ambient air quality standards*. This regulation contains the primary and secondary Ambient Air Quality Standards for sulfur oxides, particulate matter, carbon monoxide, ozone, nitrogen dioxide, lead, hydrogen sulfide, gaseous fluorides, total fluorides, and odors are specified in Appendix A of 401 KAR 53:010.

401 KAR 61:036, *Emission guidelines and compliance times for municipal solid waste (MSW) landfills*, applies to each MSW landfill that commenced construction, modification, or reconstruction on or before July 17, 2014. This regulation requires compliance with **40 CFR 60, Subpart Cf**, *Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills*.

401 KAR 63:002, Section 2(4)(hhh), 40 C.F.R. 63.1930 through 63.1990, Table 1 (Subpart AAAA), *National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills*, applies to each municipal solid waste (MSW) landfill that has accepted waste since November 8, 1987 or has additional capacity for waste deposition and has a design capacity equal to or greater than 2.5 million megagrams (Mg) and 2.5 million cubic meters (m³) and has estimated uncontrolled emissions equal to or greater than 50 megagrams per year (Mg/yr) NMOC as calculated according to 40 CFR 63.1959.

401 KAR 63:010, *Fugitive emissions*, applies to each affected facility which emits or could emit fugitive emissions not elsewhere subject to an opacity standard within 401 KAR Chapters 50 through 68.

401 KAR 63:015, *Flares*, applies to each affected facility which means flares as defined in 401 KAR 63:015, Section 2.

40 CFR 60.18, *General control device and work practice requirements*, applies to control devices (flare) used to comply with applicable subparts of 40 CFR part 60.

Emission Unit 002 - Municipal Solid Waste (MSW) Landfill

40 CFR 61, Subpart M, *National Emission Standard for Asbestos*, applies to each active asbestos waste disposal site.

40 CFR 63.11, *Control device and work practice requirements*, applies to control devices (flare) used to comply with applicable subparts of 40 CFR part 63.

Comments:

Emission factors from AP-42 Chapter 2.4 (May 2025) and site-specific data, including worst-case site specific H₂S concentration of 91 ppm. H₂S monitoring for the landfill gas collection system has been included in the permit and is used for accurate quantification of fugitive H₂S emissions and SO₂ emissions produced by the flare.

Monitoring of liquid levels for gas wells is included in the permit to ensure adequate gas collection, which is dependent on the availability of well perforations. Excessive liquid in wells can also inhibit proper methane production and degrade monitored well parameters causing excessive oxygen intrusion and high temperatures.

The permit also includes alternate operating scenarios for GCCS Removal, Requests for Higher Operating Values (HOV), and Requests for Decommissioning of Gas Collectors.

If Laurel Ridge Landfill receives (From the Division of Waste Management) an increase in the permitted volume design capacity of the landfill by either lateral or vertical expansion based on its permitted design capacity as of July 17, 2014, the landfill must submit an application to the Division incorporating into the permit the requirements of 40 CFR 60, Subpart XXX with a specified date that construction on the lateral or vertical expansion is expected to occur. Pursuant to 40 CFR 60, Subpart XXX, modification does not occur until the permittee commences construction on the lateral or vertical expansion.

Emission Unit 001 - Landfill Flare				
Pollutant	Emission Limit or Standard	Regulatory Basis for Emission Limit or Standard	Emission Factor Used and Basis	Compliance Method
Opacity	< 20%	401 KAR 63:015, Section 3	-	Weekly qualitative observations and recordkeeping.
Initial Construction Date: 2003				
Process Description: Open landfill flare which combusts landfill gas. Model: Shaw LFG Specialties Model CF 102518 Maximum Capacity: 2300 scfm				
Applicable Regulations: 401 KAR 61:036 , <i>Emission guidelines and compliance times for municipal solid waste (MSW) landfills</i> , applies to each MSW landfill that commenced construction, modification, or reconstruction on or before July 17, 2014. This regulation requires compliance with 40 CFR 60, Subpart Cf , <i>Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills</i> . 401 KAR 63:002, Section 2(4)(hhh) , 40 C.F.R. 63.1930 through 63.1990, Table 1 (Subpart AAAA) , <i>National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills</i> , applies to each municipal solid waste (MSW) landfill that has accepted waste since November 8, 1987 or has additional capacity for waste deposition and has a design capacity equal to or greater than 2.5 million megagrams (Mg) and 2.5 million cubic meters (m ³) and has estimated uncontrolled emissions equal to or greater than 50 megagrams per year (Mg/yr) NMOC as calculated according to 40 CFR 63.1959. 401 KAR 63:015, Flares , applies to each affected facility which means flares as defined in 401 KAR 63:015, Section 2. 40 CFR 60.18 , <i>General control device and work practice requirements</i> , applies to control devices (flare) used to comply with applicable subparts of 40 CFR part 60. 40 CFR 63.11 , <i>Control device and work practice requirements</i> , applies to control devices (flare) used to comply with applicable subparts of 40 CFR part 63.				
Comments: This flare is a control device installed to meet the requirements of 40 CFR 60.33f(c)(1) and 40 CFR 63.1959(b)(2)(iii)(A). Emission factors from AP-42 Chapter 2.4 (May 2025), Table 2.4-1, AP-42 Chapter 13.5, Table 13.5-1, and worst-case site specific H ₂ S concentration of 91 ppm. Control efficiency for Non-Methane Organic Compounds (NMOC) is 98%.				

Emission Unit 004 – Paved and Unpaved Haul Roads

Initial Construction Date: 1971

Process Description:

Paved haul roads and unpaved haul roads.

Maximum Capacity: 132,802 VMT paved, 12,614 VMT unpaved

Control Devices: Water trucks

Applicable Regulation:

401 KAR 63:010, *Fugitive emissions*, applies to each affected facility which emits or could emit fugitive emissions not elsewhere subject to an opacity standard within 401 KAR Chapters 50 through 68.

Comments:

Emission factors from AP-42 Chapter 13.2.1 and AP-42 Chapter 13.2.2. Potential emissions are calculated using the “maximum capacity” listed, however, roads at landfills change often, and the maximum capacity does not reflect the usage of the roads at any given time. The maximum capacity represents the maximum that the PTE was calculated with, and a permit revision application should be submitted if this maximum is not adequate to estimate the potential emissions of the activity in the future.

Emission Unit 005 - Site Construction/Operation

Initial Construction Date: 1971

Description:

Material handling includes equipment operations of bulldozer(s), compactor(s), excavator(s) and loader(s), soil material and soil covering operations.

Maximum Capacity: 131,400 tons/yr for cover operations, 46,253 VMT for construction equipment, 65,700 tons/yr for bulldozing operations and 85-acre years/yr (wind erosion)

Control Devices: Wetting of Material

Applicable Regulation:

401 KAR 63:010, *Fugitive emissions*, applies to each affected facility which emits or could emit fugitive emissions not elsewhere subject to an opacity standard within 401 KAR Chapters 50 through 68.

Comments:

Calculations based on 131,400 tons of waste processed/yr and AP-42 - 13.2.4-4. Emissions are calculated using the “maximum capacity” listed, however, the maximum capacity does not reflect the permitted (via DWM) waste acceptance rate. The maximum capacity simply represents the maximum that the PTE was calculated with, and a permit revision application should be submitted if this maximum is not adequate to estimate the potential emissions of the activity in the future.

Emission Unit 006 - Industrial Waste Solidification Process

Initial Construction Date: 1971

Process Description: Mixing of liquid industrial wastes from various sources with dry mediums to form a solid to be landfilled.

Maximum Capacity: 1,250 tons/yr of liquid waste

Control Devices: None

Applicable Regulation:

401 KAR 63:010, *Fugitive emissions*, applies to each affected facility which emits or could emit fugitive emissions not elsewhere subject to an opacity standard within 401 KAR Chapters 50 through 68.

State-Origin Requirement:

401 KAR 63:020, *Potentially hazardous matter or toxic substances*.

Comments: Emissions from source based on Toxicity Characteristic Leaching Procedure (TCLP) maximum values for listed HAPs and assumption of 100% VOC emission. If more refined data becomes available for each waste, the more refined data should be used by the source for HAP calculations to ensure all HAPs are accounted for.

SECTION 3 – EMISSIONS, LIMITATIONS AND BASIS (CONTINUED)

Testing Requirements/Results

Emission Unit(s)	Control Device	Parameter	Regulatory Basis	Frequency	Test Method	Permit Limit	Test Result	Thruput and Operating Parameter(s) Established During Test	Activity Graybar	Date of Compliance Testing
002	None	C _{NMOC} M _{NMOC}	40 CFR 60.754(a)(3)	Once every 5 years until >50 Mg	U.S. EPA Method 25C	50 Mg	13.93 Mg/yr (1996)	174 ppmv as Hexane; 210,000 tpy waste disposed	N/A	10/9/1996-10/11/1996
002	None	C _{NMOC} M _{NMOC}	40 CFR 60.754(a)(3)	Once every 5 years until >50 Mg	U.S. EPA Method 25C	50 Mg	123.1 Mg/yr (2000)	1008 ppmv as Hexane; 202,000 tpy waste disposed	N/A	10/3/2000-10/4/2000
002	None	H ₂ S ppm	401 KAR 50:045, Section 1	Within 180 days of final permit issuance, Annually thereafter	Method 25C/ ASTM D5504	N/A	95 ppmv	543 scfm	CMN20190003	7/30/2019
002	None	H ₂ S ppm	401 KAR 50:045, Section 1	Annual	Method 25C/ ASTM D5504	N/A	45 ppmv	692 scfm	CMN2020003	7/30/2020

Testing Requirements/Results

Emission Unit(s)	Control Device	Parameter	Regulatory Basis	Frequency	Test Method	Permit Limit	Test Result	Thruput and Operating Parameter(s) Established During Test	Activity Graybar	Date of Compliance Testing
002	None	H ₂ S ppm	401 KAR 50:045, Section 1	Annual	Method 25C/ ASTM D5504	N/A	47.3 ppmv	425.3 scfm	CMN20210004	8/3/2021
002	None	H ₂ S ppm	401 KAR 50:045, Section 1	Annual	Method 25C/ ASTM D5504	N/A	1.1 ppmv	458.0 scfm	CMN20220003	9/12/2022
002	None	H ₂ S ppm	401 KAR 50:045, Section 1	Annual	Method 25C/ ASTM D5504	N/A	23.5 ppmv	680 scfm	CMN20230003	8/28/2023
002	None	H ₂ S ppm	401 KAR 50:045, Section 1	Annual	ASTM D5504	N/A	84 ppm	868 scfm	CMN20240005	11/4/2024
002	None	H ₂ S ppm	401 KAR 50:045, Section 1	Annual	Method 25C/ ASTM D5504	N/A	91 ppm	1023 scfm	CMN20250003	12/9/2025
001	Flare	Net heating value	40 CFR 60.18(f)(3)	Initial	US EPA Method 18	> 7.45 MJ/scm	17.59 MJ/scm	740 scfm	CMN20150002	10/9/2003
001	Flare	Actual Exit velocity	40 CFR 60.18(f)(4)	Initial	US EPA Method 1 & 2	< 37.2 m/s	6.89 m/s	740 scfm	CMN20150002	10/9/2003

Testing Requirements/Results

Emission Unit(s)	Control Device	Parameter	Regulatory Basis	Frequency	Test Method	Permit Limit	Test Result	Thruput and Operating Parameter(s) Established During Test	Activity Graybar	Date of Compliance Testing
001	Flare	Visible Emissions	40 CFR 60.18(f)(1)	Initial	US EPA Method 22	No visible emission to exceed total of 5 minutes during any consecutive 2 hours.	No visible emissions	740 scfm	CMN20150002	10/9/2003

Footnotes: Source exceeded 50 Mg/yr of NMOC by 2001 as documented in letter submitted with GCCS plan on June 7, 2002.

Performance testing must be conducted in accordance with 401 KAR 50:045. The permittee must submit a test protocol to the Source Sampling Section at least 60 days prior to testing. Retesting may be required if results are invalid, if process or control device changes occur, or if compliance cannot be demonstrated. A test report must be submitted to the Source Sampling Section no later than 45 days after the completion of fieldwork.

SECTION 4 – SOURCE INFORMATION AND REQUIREMENTS

Table A - Group Requirements:

Emission and Operating Limit	Regulation	Emission Unit
N/A	N/A	N/A

Table B - Summary of Applicable Regulations:

Applicable Regulations	Emission Unit
401 KAR 53:010 , <i>Ambient air quality standards</i>	Site-wide
401 KAR 61:036 , <i>Ambient emission guidelines and compliance times for municipal solid waste (MSW) landfills</i> , requiring compliance with 40 CFR 60, Subpart Cf , <i>Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills</i>	EU 001 & 002
401 KAR 63:002, Section 2(4)(hhh), 40 C.F.R. 63.1930 through 63.1990, Table 1 (Subpart AAAA) , <i>National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills</i>	EU 001 & 002
401 KAR 63:010 , <i>Fugitive emissions</i>	EU 002, EU 004, EU 005 & EU 006
401 KAR 63:015 , <i>Flares</i>	EU 001
401 KAR 63:020 , <i>Potentially hazardous matter or toxic substances</i>	EU 006
40 CFR 60.18 , <i>General control device and work practice requirements</i>	EU 001
40 CFR 61, Subpart M , <i>National Emission Standard for Asbestos</i>	EU 002
40 CFR 63.11 , <i>Control device and work practice requirements</i>	EU 001

Table C - Summary of Precluded Regulations:

Precluded Regulations	Emission Unit
N/A	N/A

Table D - Summary of Non-Applicable Regulations:

Non-Applicable Regulations	Emission Unit
N/A	N/A

Air Toxic Analysis

401 KAR 63:020, *Potentially Hazardous Matter or Toxic Substances*

The Division for Air Quality (Division) has performed refined air modeling using AERMOD on October 24, 2017, of potentially hazardous matter or toxic substances that may be emitted by the facility based upon the process rates, material formulations, stack heights and other pertinent information provided by the applicant. Based upon this information, the Division has determined that the conditions outlined in this permit will assure compliance with the requirements of 401 KAR 63:020.

SECTION 4 – SOURCE INFORMATION AND REQUIREMENTS (CONTINUED)

Single Source Determination

Laurel Ridge Landfill, Source ID #: 21-125-00089 (A.I. #2581), and the adjacent VRNG Laurel Ridge, LLC, Source ID #: 21-125-00164 (A.I. #178754), are considered by the Cabinet and the United States Environmental Protection Agency to be a “single source” in determining applicability under 401 KAR 51:017, Prevention of significant deterioration of air quality (PSD) and 401 KAR 52:020, Title V operating permits. Each source is subject to 401 KAR 52:020 and will be issued individual Title V operating permit. Pursuant to the respective Title V permits, each permittee is responsible and liable for their own violations unless there is a joint cause for the violations.

SECTION 5 – COMPLIANCE ASSURANCE MONITORING

40 CFR 64, *Compliance assurance monitoring (CAM)* applies to a pollutant-specific emissions unit at a major source that is required to obtain a part 70 or 71 permit if the unit satisfies all of the following criteria:

- (1) The unit is subject to an emission limitation or standard for the applicable regulated air pollutant (or a surrogate thereof), other than an emission limitation or standard that is exempt under 40 CFR 64.2(b)(1);
- (2) The unit uses a control device to achieve compliance with any such emission limitation or standard; and
- (3) The unit has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source.

Emission Unit	Criteria 1 (Y/N)	Criteria 2 (Y/N)	Criteria 3 (Y/N)	Does CAM apply? If Y for criteria 1, 2, AND 3, then Yes, Otherwise, No.
001	N	N	N	No
002	N	N	N	No
004	N	N	N	No
005	N	N	N	No
006	N	N	N	No

* If Yes, CAM applies for any of the emission units above, then see further clarification for each listed emission unit in **Section 3**.

SECTION 6 – PERMITTING HISTORY

Permit	Permit Type	Activity #	Complete Date	Issuance Date	Summary of Action	PSD/Syn Minor
G-02-001	Initial	N/A	Unknown	7/11/2002	Initial Issuance of General Title V Permit	N/A
G-07-001	Renewal	APE20070002	3/11/2007	10/16/2007	Renewal of General Title V Permit	N/A
G-12-001	Renewal	APE20120002	10/3/2012	2/19/2013	Renewal of General Title V Permit	N/A
V-18-047	Renewal	APE20170006	2/9/2018	1/31/2019	Change from General permit to individual permit.	N/A

SECTION 7 – PERMIT APPLICATION HISTORY

N/A

APPENDIX A – ABBREVIATIONS AND ACRONYMS

AAQS	– Ambient Air Quality Standards
BACT	– Best Available Control Technology
Btu	– British thermal unit
CAM	– Compliance Assurance Monitoring
CFM	– Cubic Feet per Minute
CO	– Carbon Monoxide
Division	– Kentucky Division for Air Quality
ESP	– Electrostatic Precipitator
GCCS	– Gas Collection and Control System
GHG	– Greenhouse Gas
HAP	– Hazardous Air Pollutant
HF	– Hydrogen Fluoride (Gaseous)
HOV	– Higher Operating Value
H ₂ S	– Hydrogen Sulfide
MSDS	– Material Safety Data Sheets
mmHg	– Millimeter of mercury column height
MSW	– Municipal Solid Waste
NAAQS	– National Ambient Air Quality Standards
NESHAP	– National Emissions Standards for Hazardous Air Pollutants
NMOC	– Nonmethane Organic Compounds
NO _x	– Nitrogen Oxides
NSR	– New Source Review
PM	– Particulate Matter
PM ₁₀	– Particulate Matter equal to or smaller than 10 micrometers
PM _{2.5}	– Particulate Matter equal to or smaller than 2.5 micrometers
PSD	– Prevention of Significant Deterioration
PTE	– Potential to Emit
SO ₂	– Sulfur Dioxide
TF	– Total Fluoride (Particulate & Gaseous)
VMT	– Vehicle Miles Traveled
VOC	– Volatile Organic Compounds

APPENDIX B – GCCS PLAN HISTORY AND REQUESTED ALTERNATIVES

This landfill submitted a GCCS plan for approval in June 2002, after the landfill exceeded the 50 Mg/yr threshold, and became subject to the requirement to install and operate a GCCS according to 40 CFR 60, Subpart WWW. The landfill installed a Gas Collection and Control System (GCCS) in 2003.

The initial GCCS plan was submitted for approval in 2002, revised on February 2003, and revised again on June 29, 2017. The updated gas plan only requested two alternatives to the NSPS, and was approved on September 13, 2017. All previous requests for approval of alternatives to the NSPS are no longer valid, as they were not included in the updated GCCS plan. Below are the determinations made by the Division regarding the GCCS plan and alternatives sought by the facility.

The Division approved of the updated GCCS design plan as submitted on June 29, 2017 as outlined in Sections I, II, III, and IV.

The updated gas plan only requested two alternatives to the NSPS, and was approved on September 13, 2017. All previous requests for approval of alternatives to the NSPS are no longer valid, as they were not included in the updated GCCS plan. Below is a detailed response for each alternative requested:

Request #1: Section 60.753(c)(2) Operational Standards for Collection and Control Systems: "...oxygen shall be determined by an oxygen meter using Method 3A..."

For clarification, the Laurel Ridge Landfill is proposing to use an on-site multi-gas analyzer, in lieu of a laboratory method, for determining the oxygen content of the landfill gas at each well and monitoring point. The site will be using a portable meter, such as a GEM-500 or equivalent, calibrated to the manufacturer's specifications, to determine the oxygen content of the gas.

Division's Response: The Division approves of the use of portable gas composition analyzers in conjunction with Method 3A to monitor the oxygen level at a wellhead. The portable gas composition analyzer may be used to monitor the oxygen level at a wellhead provided that the analyzer is calibrated and meets all QA/QC requirements according to Method 3A. ASTM D6522-11 may be used as an alternative to Method 3A for wellhead monitoring as long as all the quality assurance is conducted as required by ASTM D6522-11.

Request #2: Section 60.753(d) Operational Standards for Collection and Control Systems: "...A surface monitoring design plan shall be developed...Areas with steep slopes or other dangerous areas may be excluded from surface testing

The Laurel Ridge Landfill is proposing to exclude dangerous areas such as slopes steeper than 4:1 from surface testing.

Division's Response: 40 CFR 60.753(d) already provides for exclusion of dangerous areas, so Division approval of exclusion of dangerous areas is unnecessary.