Commonwealth of Kentucky
Division for Air Quality

STATEMENT OF BASIS / SUMMARY

Title V, Operating
Permit: V-26-014

Epperson Waste Disposal, Inc.
2360 Cynthiana Rd.
Williamstown, KY 41097

May 28, 2026
Daniel Cissell, Reviewer

SOURCE ID:	21-081-00018
AGENCY INTEREST:	1483
ACTIVITY:	APE20230004

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SECTION 1 – SOURCE DESCRIPTION

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

Single Source Det. ☐ Yes ☒ No If Yes, Affiliated Source AI:

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

28 Source Category ☐ Yes ☒ No If Yes, Category:

County: Grant
Nonattainment Area ☒ N/A ☐ PM_{10} ☐ $PM_{2.5}$ ☐ CO ☐ NO_X ☐ SO_2 ☐ Ozone ☐ Lead
If yes, list Classification:

PTE* greater than 100 tpy for any criteria air pollutant ☐ Yes ☒ No
If yes, for what pollutant(s)?
☐ PM_{10} ☐ $PM_{2.5}$ ☐ CO ☐ NO_X ☐ SO_2 ☐ VOC

PTE* greater than 250 tpy for any criteria air pollutant ☐ Yes ☒ No
If yes, for what pollutant(s)?
☐ PM_{10} ☐ $PM_{2.5}$ ☐ CO ☐ NO_X ☐ SO_2 ☐ 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:
Epperson Waste Disposal LLC (Epperson Landfill) in Grant County, Kentucky is a municipal solid waste (MSW) landfill that commenced construction in 1968 and was modified in 1992. The landfill has a design capacity of 11,888,684 cubic yards and a calculated emission rate of more than 50 megagrams per year of non-methane organic compounds (NMOC). The landfill had previously installed a voluntary Gas Collection and Control System (GCCS) in 1998, 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 started accepting waste in 1968, and Unit 2, which started accepting waste in 1992.

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) tanks, haul roads, site construction, and leachate storage tanks.

The facility also has several listed trivial activities such as oil, transmission fluid and antifreeze tanks, portable air compressors and water pump for maintenance activities, space heaters for human comfort, and several small non-road engines related to maintenance activities (all less than

35 HP). The trivial activities at the facility are all included under items #3, #12, #13, and #14 of the trivial activities list.

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-26-014 Activities: APE20230004

Received: 6/1/2023 Application Complete Date(s): 7/29/2023

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

- *APE20220004 – Section 502(b)(10) Change*: Addition of Insignificant Activity: Incinerator Ash Stockpiles
- *APE20230008 – Off-Permit Change*: Request to construct and operate a fourth ash stockpile as vegetative cover in the capping process.

Description of Action:
Republic Services of Kentucky, LLC d/b/a Epperson Waste Disposal, Inc. submitted an application to renew the current Title V permit. With this renewal, the following changes have been made:

- Additional emissions related to final cover placement to permanently close the MSW landfill. These emissions were calculated based on vehicle mile traveled (VMT) and have been incorporated into the emission calculations for unpaved roads in EU 003.
- Removal of EP 006: 550 Gallon Gasoline Storage Tank & Dispensing, because the emission point was removed from the facility.
- Emission calculations for the landfill and flare (EP 004 and 001a) were updated to use the current version of AP-42, Chapter 2.4 (May 2025), as well as worst-case site specific data for H_2S.
- Updated permit language to be consistent and clear.
- Added the requirements of 40 CFR 60, Subpart Cf and 40 CFR 63, Subpart AAAA into the permit, 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.

The site is conducting closure operations, however, the landfill is not considered a “closed landfill” under 40 CFR 60, Subpart Cf or 40 CFR 63, Subpart AAAA until a closure report and permit application has been submitted to the Division to permit the facility as a permanently closed facility.

V-26-014 Emission Summary		
Pollutant	**2025 Actual (tpy)[2]**	**PTE V-26-014 (tpy)**
CO	43.96	87.85
NO_X	8.08	19.27
PT	0.99[1]	4.76
PM_{10}	0.99[1]	4.76
$PM_{2.5}$	0.99[1]	4.76
SO_2	0.66	4.65
VOC	3.29	1.37
Lead	0	0
Greenhouse Gases (GHGs)		
Carbon Dioxide	33,036	59,130
Methane	2,612.6	232
Nitrous Oxide	0.14	0.62
CO_2 Equivalent (CO_2e)	98,392.7	65,791
Hazardous Air Pollutants (HAPs)		
Dichloromethane	-[3]	1.76
Hexane	-[3]	0.84
Hydrochloric Acid	0.7	2.16
Tetrachloroethylene (PCE)	-[3]	0.91
Toluene	1.32	5.32
Vinyl Chloride	-[3]	0.68
Xylenes	0.47	1.88
Combined HAPs:	2.03	16.70

[1]**Note:** EP003: Paved and Unpaved Haul Roads and EP005: Site Construction are the largest contributors to the site's actual PM emissions. Since the site is inactive, the throughput for reporting both of these is zero for the year 2025.

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

[3]**Note:** Pollutant is not currently tracked in EIS.

SECTION 3 – EMISSIONS, LIMITATIONS AND BASIS

Emission Unit 004 – Municipal Solid Waste (MSW) Landfill

Initial Construction and Modification Date: 1968, modified 1992

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 voluntarily installed a Gas Collection and Control System (GCCS) in 1998, and submitted a GCCS plan for approval on June 6, 2002, after the landfill exceeded the 50 Mg/yr threshold in 2001 and became subject to the requirement to install and operate a GCCS according to 40 CFR 60, Subpart WWW. The GCCS plan was approved by the Division in the renewal process for V-18-030 (APE20170007), issued on December 8, 2018. No alternatives to the requirements of the NSPS were requested with the GCCS plan submittal.

The landfill consists of Unit 1, which started accepting waste in 1968, and Unit 2, which started accepting waste in 1992.

Permitted Design Capacity: 11,888,684 cubic yards (9,089,551 cubic meters)

Applicable Regulation:
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 (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 63:010, *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 004 – 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 H_2S concentration of 50 ppm. H_2S monitoring for the landfill gas collection system has been included in the permit and is used for accurate quantification of fugitive H_2S emissions and SO_2 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 Epperson Waste Disposal, Inc. 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 001a – 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: 8/1/2016

Process Description:
Open landfill flare which combusts landfill gas.
Model: LFG Specialties CF103418
Maximum Capacity: 2131 scfm

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

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:
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 are derived 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_2S concentration of 50 ppm. Control efficiency for Non-Methane Organic Compounds (NMOC) is 98%.

Emission Unit 003 - Paved and Unpaved Haul Roads

Initial Construction Date: 1968

Process Description:
Description: Paved haul roads and unpaved haul roads
Maximum Capacity: 14,375 VMT paved, 100,659 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. Unpaved roadways also include VMT associated with final cover operations.

Emission Unit 005 – Site Construction & Operation

Initial Construction Date: 1968

Process Description:
Material handling including equipment operations of bulldozer(s), compactor(s), excavator(s) and loader(s), soil material and soil covering operations.
Maximum Capacity: 621,700 tons/yr waste processed
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 621,700 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.

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 last Compliance Testing
004	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	22.9 Mg/yr	367 ppmv as Hexane	N/A	9/14/1996 & 9/24/1996
004	None	C_{NMOC} M_{NMOC}	40 CFR 60.754(a)(3)	Once every 5 years until >50 Mg	No retest, only recalculation	50 Mg	Projected 55.6 Mg/yr in 2001	No retest; Increased waste acceptance rate required recalculation	N/A	Recalculation submitted 7/14/1998
004	None	H_2S ppm	401 KAR 50:045, Section 1	Within 180 days of final permit issuance, Annually thereafter	ASTM D5504	N/A	18ppm	1000-1800 cfm	CMN20190003	6/4/2019
004	None	H_2S ppm	401 KAR 50:045, Section 1	Initial/ Annual	ASTM D5504	N/A	6.9 ppm	2131 cfm	CMN20200003	8/3/2020
004	None	H_2S ppm	401 KAR 50:045, Section 1	Annual	25C/ ASTM D5504	N/A	2.2 ppm	1200 cfm	CMN20210003	8/10/2021

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 last Compliance Testing
004	None	H_2S ppm	401 KAR 50:045, Section 1	Annual	ASTM D5504	N/A	8.43 ppm	1105 cfm	CMN20220003	8/16/2022
004	None	H_2S ppm	401 KAR 50:045, Section 1	Annual	ASTM D5504	N/A	1.71 ppm	871 cfm	CMN20230003	8/8/2023
004	None	H_2S ppm	401 KAR 50:045, Section 1	Annual	ASTM D5504	N/A	0.53 ppm	859 cfm	CMN20240003	8/6/2024
004	None	H_2S ppm	401 KAR 50:045, Section 1	Annual	ASTM D5504	N/A	27.47 ppm	941.3 cfm	CMN20250003	7/8/2025
001a	Flare	Net heating value	40 CFR 60.18(f)(3)	Initial	US EPA Method 18	> 7.45 MJ/scm	16.1 MJ/scm	944 cfm	CMN20170001	5/8/2017
001a	Flare	Actual Exit velocity	40 CFR 60.18(f)(4)	Initial	US EPA Method 1 & 2	< 37.2 m/s	28.7 m/s	944 cfm	CMN20170001	5/8/2017

Footnotes: 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, *Ambient air quality standards.*	Site-wide
401 KAR 61:036, *Emission guidelines and compliance times for municipal solid waste (MSW) landfills,* requiring compliance with **40 CFR 60, Subpart Cf,** *Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills*	EU 001a, 004
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*	EU 001a, 004
401 KAR 63:010, *Fugitive emissions*	EU 003, 004, & 005
401 KAR 63:015, *Flares*	EU 001a
40 CFR 60.18, *General control device and work practice requirements*	EU 001a
40 CFR 61, Subpart M, *National Emission Standard for Asbestos*	EU 004
40 CFR 63.11, *Control device and work practice requirements*	EU 001a

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
N/A

Single Source Determination
N/A

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.**
004	N	N	N	No
001a	N	N	N	No
003	N	N	N	No
005	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
S-98-100	Operating (Flare only)	APE20050005	Unknown	12/14/1998	Authorized to operate LFG flare	N/A
S-98-100R1	Admin. Amend.	Unknown	5/5/2000	6/15/2000	Change in facility name	N/A
G-02-001	Initial	APE20050002	1997	7/11/2002	Initial Issuance of Title V General Permit	N/A
G-07-001	Renewal	APE20070002	3/15/2007	10/16/2007	Renewal General Title V Permit	N/A
V-18-030	Renewal	APE20170007	9/21/2017	12/8/2018	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 & Control System
GHG – Greenhouse Gas
HAP – Hazardous Air Pollutant
HF – Hydrogen Fluoride (Gaseous)
HOV – Higher Operating Value
H_2S – Hydrogen Sulfide
MSDS – Material Safety Data Sheets
MSW – Municipal Solid Waste
mmHg – Millimeter of mercury column height
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 voluntarily installed a Gas Collection and Control System (GCCS) in 1998, and submitted a GCCS plan for approval on June 6, 2002, after the landfill exceeded the 50 Mg/yr threshold in 2001 and became subject to the requirement to install and operate a GCCS according to 40 CFR 60, Subpart WWW. The GCCS plan was approved by the Division in the renewal process for V-18-030 (APE20170007), issued on December 8, 2018. No alternatives to the requirements of the NSPS were requested with the GCCS plan submittal.