



**ENVIRONMENTAL
INFORMATION
LOGISTICS, LLC**

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New Franklin, OH 44203
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July 3, 2023

Ms. Amy Tempus-Doom
Division for Air Quality - Permit Review Branch
300 Sower Blvd., 2nd Floor
Frankfort, KY 40601
Submitted Electronically – Kentucky Business One Stop Portal

RE: Valley View Landfill – Sulphur, KY
Source I.D. No. 21-223-00005
Title V Operating Permit V-18-038 – Renewal Application

Dear Ms. Tempus-Doom:

The Valley View Landfill located in Sulphur, Kentucky was issued a Title V Operating Permit Renewal on January 13, 2019. 401 KAR 52:020 Section 12 and Condition G.2.a require submittal of a timely and complete renewal application six months before permit expiration. For Valley View Landfill, that date corresponds to July 13, 2023.

Enclosed is a pdf of the application with the Responsible Official signature. The application consists of the following:

- Emissions Calculation Updates for significant activities and an updated list of insignificant activities;
- Application forms;
- New applicable federal requirements: 40 CFR Part 62 (Federal Plan), Subpart OOO and 40 CFR 63, Subpart AAAA (Revised Landfill NESHAP); and
- List of non-applicable state and federal requirements for permit shield coverage.

Environmental Information Logistics is submitting the application on behalf of the landfill owner, Republic Services of Kentucky, LLC. If you have any questions or comments, please call me at (630) 209-3931 or Branham Lafferty of Valley View at (618) 936-4379.

Sincerely,
Environmental Information Logistics, LLC

Emily M. Nelson
Senior Project Manager

cc: Branham Lafferty, Valley View Landfill

**Valley View Landfill
SOURCE I.D. #21-223-00005**

Application for Renewal of a Title V Permit

**Sulphur
Trimble County, Kentucky**

July 2023

Prepared by:

**Environmental Information Logistics, LLC
130 E. Main Street
Caledonia, MI 49316**

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INTRODUCTION

Republic Services of KY, LLC (Republic) owns and operates the Valley View Landfill (Valley View), a municipal solid waste landfill located in Sulphur, Trimble County, Kentucky. Trimble County has been designated as attainment for all criteria pollutants.

On January 13, 2019, the Kentucky Department for Environmental Protection issued a Title 5 Operating Permit (Air Quality General Permit) for the facility. The permit expires on January 13, 2024, and per General Condition G.2.a, a renewal application is due six months prior to the expiration date of the permit (i.e., by July 13, 2023). Valley View is requesting a renewal of the Title 5 Air Quality General Permit, with appropriate updates, clarifications, and modifications, in accordance with 401 KAR 52:020 Section 12.

The current permit includes the following significant emission units:

<u>Emissions Unit No.</u>	<u>Emissions Unit Description</u>
004a	Municipal Solid Waste (MSW) Landfill
001a	Landfill Flare
004b	Paved and Unpaved Haul Roads
005	Site Construction/Operation
006	Industrial Waste Solidification Process
007	350 Gallon Gasoline Storage Tank & Dispensing

There are no new significant emissions units to add for this renewal application. However, the facility is requesting an update to throughput limits for Emissions Unit No. 005 – Site Construction and Operation, to match recent off-permit change requests for the site’s paved and unpaved haul road throughputs.

One significant change to the facility’s gas management is the planned operation of a third part Renewable Natural Gas (RNG) plant. Archaea Valley View RNG LLC submitted a federally enforceable state origin permit application to KDEP in September 2022. KDEP has not issued the final permit as of the date of this submittal. The RNG plant is considered a separate source from the landfill. As a result of this project, it is expected that the majority of the gas produced by the landfill will be processed and sent to an interstate natural gas transmission pipeline. Emissions from the site’s open flare will decrease as a result after the plant begins full-time operations.

The following insignificant emissions units were identified in the current permit:

- Leachate Storage Tank (100,000 gallons)
- Leachate Storage Tank (140,000 gallons)
- Leachate Storage Tank (400,000 gallons)
- Frac Tank (21,000 gallons)
- Frac Tank (21,000 gallons)
- Propane Tank (50 gallons)
- Propane Tank (500 gallons)
- Propane Tank (500 gallons)
- Propane Tank (500 gallons)

- Propane Tank (1,000 gallons)
- Propane Tank (1,000 gallons)
- Diesel Storage Tank (300 gallons)
- Diesel Storage Tank (1,000 gallons)
- Diesel Storage Tank (10,000 gallons)
- One parts cleaner

All of the above-listed insignificant emissions units are still present at the facility; none have been removed.

A summary of additional requested updates to the current permit are provided in this application. These include:

- Emissions calculation updates for the landfill and haul roads (Appendix A);
- New applicable regulations (40 CFR 62 Subpart OOO and revised 40 CFR 63 Subpart AAAA); and
- List of non-applicable state and federal requirements for permit shield coverage.

Application forms are provided in Section 2. A site map is included in Appendix C, and a process flow diagram is provided in Appendix D.

Newly Applicable/Revised Federal Regulations

40 CFR 62, Subpart OOO (Federal Plan Requirements for Municipal Solid Waste Landfills That Commenced Construction On or Before July 17, 2014 and Have Not Been Modified or Reconstructed Since July 17, 2014): On May 21, 2021, the Federal Register published the federal plan requirements for municipal solid waste (MSW) landfills that commenced construction before July 17, 2014, such as Valley View, and are in states where a state plan has not been approved, such as Kentucky. The rule, 40 CFR 62, Subpart OOO (Federal Plan), went into effect on June 21, 2021. This closes the loop to allow landfills in Kentucky to smoothly transition into the requirements of the revised NESHAP. Valley View is considered a Legacy Controlled Landfill (as defined in §62.16730), and as such, was not required to submit several reports or comply with the “Increments of Progress” in §62.16712 of the Federal Plan.

The Landfill NESHAP (40 CFR 63 Subpart AAAA) revisions were promulgated on March 26, 2020, and became effective September 27, 2021. All of the operational standards, compliance and monitoring requirements of the Federal Plan (§62.16717, §62.16720 & §62.16722, respectively) are now superseded by their equivalent NESHAP counterpart (§63.1958, §63.1960 & §63.1961, respectively). Additionally, selective recordkeeping and reporting requirements of the Federal Plan (§62.16724(h), (k) & (q) and §62.16726(e)) are also now superseded by their equivalent provisions of the revised Landfill NESHAP (§63.1981(h), (j) & (k) and §63.1983(e), respectively).

Only the relevant provisions of the Federal Plan which have not been superseded by the Landfill NESHAP should be incorporated. These include the following regulatory citations:

- §62.16710(a) – Scope
- §62.16711(a), (d) – (f) & (h) – Designated Facilities

- §62.16714(a), (b), (c)(2) – (4) & (f) – Standards for MSW Landfill Emissions
- §62.16718(b) – (e) – Test Methods
- §62.16724(d)(6) & (7), (e) – (g), (j) & (l) - Reporting
- §62.16726(a) – (d), (e)(6) & (h) – (j) – Recordkeeping
- §62.16728 – Specifications for Active Systems
- §62.16730 – Definitions

40 CFR 63, Subpart AAAA (Revised – National Emissions Standards for Hazardous Air Pollutants – Municipal Solid Waste Landfills): As stated previously, on March 26, 2020, the EPA promulgated substantial revisions to the Landfill NESHAP (40 CFR 63 Subpart AAAA). The intent was to incorporate the monitoring, recordkeeping, reporting and compliance provisions of the Landfill NSPS (40 CFR 60 Subparts WWW and XXX) into the revised Landfill NESHAP and make the NESHAP the primary air compliance regulation for landfill compliance. These provisions become effective after September 27, 2021. Also on March 26, 2020, the EPA revised the Landfill NSPS to provide a sunset date for 40 CFR 60 Subpart WWW once the MSW landfill “*Becomes subject to the more stringent requirements in an approved and effective state or federal plan that implements subpart Cf of this part*” (see §60.750(d)(1)). On May 21, 2021, the Federal Register published the federal plan requirements for municipal solid waste (MSW) landfills that commenced construction before July 17, 2014. Valley View is subject to the Federal Plan as stated above. Since the NESHAP is now primarily the governing federal air regulation for landfills, the renewal permit issued for Valley View should incorporate the revised NESHAP provisions and remove all prior references to 40 CFR 60 Subpart WWW.

APPLICATION FORMS

The following application forms are included in this section:

- DEP Form 7007AI – Administrative Information
- DEP Form 7007B – Manufacturing or Processing Operations
- DEP Form 7007J – Volatile Liquid Storage
- DEP Form 7007N – Emissions, Stacks and Controls Information
- DEP Form 7007V – Applicable Requirements & Compliance Activities
- DEP Form 7007CC – Compliance Certification
- DEP Form 7007DD – Insignificant Activities
- DEP Form 7007GG – Control Equipment
- DEP Form 7007HH – Haul Roads

DEP FORM 7007AI

Division for Air Quality

300 Sower Boulevard
Frankfort, KY 40601
(502) 564-3999

DEP7007AI

Administrative Information

- ☐ Section AI.1: Source Information
☐ Section AI.2: Applicant Information
☐ Section AI.3: Owner Information
☐ Section AI.4: Type of Application
☐ Section AI.5: Other Required Information
☐ Section AI.6: Signature Block
☐ Section AI.7: Notes, Comments, and Explanations

Additional Documentation

☐ Additional Documentation attached

Source Name: Republic Services of Kentucky, LLC d/b/a Valley View Landfill

KY EIS (AFS) #: 21- 223-00005

Permit #: V-18-038

Agency Interest (AI) ID: 4059

Date: 6/30/2023

Section AI.1: Source Information

Physical Location Address:	Street:	<u>1920 Sulphur Road</u>		
	City:	<u>Sulphur</u>	County: <u>Trimble</u>	Zip Code: <u>40070</u>
Mailing Address:	Street or P.O. Box:	<u>P.O. Box 3, 1920 Sulphur Road</u>		
	City:	<u>Sulphur</u>	State: <u>Kentucky</u>	Zip Code: <u>40070</u>

Standard Coordinates for Source Physical Location

Longitude: 85.1723 (decimal degrees) **Latitude:** 38.3063 (decimal degrees)

Primary (NAICS) Category: Solid Waste Landfill **Primary NAICS #:** 562212

Classification (SIC) Category:		Refuse Systems		Primary SIC #:		4953	
Briefly discuss the type of business conducted at this site:		This site is a permitted municipal solid waste landfill.					
Description of Area Surrounding Source:	☒ Rural Area	☐ Industrial Park	☐ Residential Area	Is any part of the source located on federal land?	☐ Yes	Number of Employees:	10
	☐ Urban Area	☐ Industrial Area	☐ Commercial Area		☐ No		
Approximate distance to nearest residence or commercial property:		100 ft.		Property Area:	791 acres		Is this source portable? ☐ Yes ☒ No
What other environmental permits or registrations does this source currently hold or need to obtain in Kentucky?							
NPDES/KPDES: ☒ Currently Hold ☐ Need ☐ N/A							
Solid Waste: ☒ Currently Hold ☐ Need ☐ N/A							
RCRA: ☐ Currently Hold ☐ Need ☐ N/A							
UST: ☐ Currently Hold ☐ Need ☐ N/A							
Type of Regulated Waste Activity:		☐ Mixed Waste Generator	☐ Generator	☐ Recycler	☐ Other: _____		
		☐ U.S. Importer of Hazardous Waste	☐ Transporter	☒ Treatment/Storage/Disposal Facility	☐ N/A		

Section AI.2: Applicant Information

Applicant Name:	Republic Services of Kentucky, LLC d/b/a Valley View Landfill			
Title: (if individual)				
Mailing Address:	Street or P.O. Box:	P.O. Box 3, 1920 Sulphur Road		
	City:	Sulphur	State:	Kentucky
			Zip Code:	40070
Email: (if individual)				
Phone:				

Technical Contact

Name:	Branham Lafferty			
Title:	Environmental Manager			
Mailing Address:	Street or P.O. Box:	2121 Wimberg Road		
	City:	Evansville	State:	IN
			Zip Code:	47720
Email:	blafferty@republicservices.com			
Phone:	(618) 936-4379			

Air Permit Contact for Source

Name:	Emily Nelson			
Title:	Senior Project Manager			
Mailing Address:	Street or P.O. Box:	4463 Hilltop Drive		
	City:	New Franklin	State:	OH
			Zip Code:	44203
Email:	enelson@eilllc.com			
Phone:	(630) 209-3931			

Section AI.3: Owner Information☒ **Owner same as applicant****Name:** _____**Title:** _____**Mailing Address:** **Street or P.O. Box:** _____
City: _____ **State:** _____ **Zip Code:** _____**Email:** _____**Phone:** _____**List names of owners and officers of the company who have an interest in the company of 5% or more.****Name****Position**

Section AI.4: Type of Application

Current Status:	☒ Title V	☐ Conditional Major	☐ State-Origin	☐ General Permit	☐ Registration	☐ None
	☐ Name Change	☐ Initial Registration	☐ Significant Revision	☐ Administrative Permit Amendment		
Requested Action: (check all that apply)	☒ Renewal Permit	☐ Revised Registration	☐ Minor Revision	☐ Initial Source-wide Operating Permit		
	☐ 502(b)(10) Change	☐ Extension Request	☐ Addition of New Facility	☐ Portable Plant Relocation Notice		
	☐ Revision	☐ Off Permit Change	☐ Landfill Alternate Compliance Submittal	☐ Modification of Existing Facilities		
	☐ Ownership Change	☐ Closure				
Requested Status:	☒ Title V	☐ Conditional Major	☐ State-Origin	☐ PSD	☐ NSR	☐ Other: _____

Is the source requesting a limitation of potential emissions?

☐ Yes☒ No

Pollutant:	Requested Limit:	Pollutant:	Requested Limit:
☐ Particulate Matter	_____	☐ Single HAP	_____
☐ Volatile Organic Compounds (VOC)	_____	☐ Combined HAPs	_____
☐ Carbon Monoxide	_____	☐ Air Toxics (40 CFR 68, Subpart F)	_____
☐ Nitrogen Oxides	_____	☐ Carbon Dioxide	_____
☐ Sulfur Dioxide	_____	☐ Greenhouse Gases (GHG)	_____
☐ Lead	_____	☐ Other	_____

For New Construction:

Proposed Start Date of Construction:
(MM/YYYY)

Proposed Operation Start-Up Date: (MM/YYYY)

For Modifications:

Proposed Start Date of Modification:
(MM/YYYY)

Proposed Operation Start-Up Date: (MM/YYYY)

Applicant is seeking coverage under a permit shield.

☒ Yes☐ No

Identify any non-applicable requirements for which permit shield is sought on a separate attachment to the application.

Section AI.5 Other Required Information

Indicate the documents attached as part of this application:

- | | |
|--|--|
| ☐ DEP7007A Indirect Heat Exchangers and Turbines | ☒ DEP7007CC Compliance Certification |
| ☒ DEP7007B Manufacturing or Processing Operations | ☒ DEP7007DD Insignificant Activities |
| ☐ DEP7007C Incinerators and Waste Burners | ☐ DEP7007EE Internal Combustion Engines |
| ☐ DEP7007F Episode Standby Plan | ☐ DEP7007FF Secondary Aluminum Processing |
| ☒ DEP7007J Volatile Liquid Storage | ☒ DEP7007GG Control Equipment |
| ☐ DEP7007K Surface Coating or Printing Operations | ☒ DEP7007HH Haul Roads |
| ☐ DEP7007L Mineral Processes | ☐ Confidentiality Claim |
| ☐ DEP7007M Metal Cleaning Degreasers | ☐ Ownership Change Form |
| ☒ DEP7007N Source Emissions Profile | ☐ Secretary of State Certificate |
| ☐ DEP7007P Perchloroethylene Dry Cleaning Systems | ☒ Flowcharts or diagrams depicting process |
| ☐ DEP7007R Emission Offset Credit | ☐ Digital Line Graphs (DLG) files of buildings, roads, etc. |
| ☐ DEP7007S Service Stations | ☒ Site Map |
| ☐ DEP7007T Metal Plating and Surface Treatment Operations | ☐ Map or drawing depicting location of facility |
| ☒ DEP7007V Applicable Requirements and Compliance Activities | ☐ Safety Data Sheet (SDS) |
| ☐ DEP7007Y Good Engineering Practice and Stack Height Determination | ☐ Emergency Response Plan |
| ☐ DEP7007AA Compliance Schedule for Non-complying Emission Units | ☐ Other: _____ |
| ☐ DEP7007BB Certified Progress Report | |

Section AI.6: Signature Block

I, the undersigned, hereby certify under penalty of law, that I am a responsible official*, and that I have personally examined, and am familiar with, the information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the information is on knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false or incomplete information, including the possibility of fine or imprisonment.



Authorized Signature

Branham Lafferty

Type or Printed Name of Signatory

06/30/2023

Date

Environmental Manager

Title of Signatory

*Responsible official as defined by 401 KAR 52:001.

Section AI.7: Notes, Comments, and Explanations

DEP FORM 7007B

Division for Air Quality

300 Sower Boulevard
Frankfort, KY 40601
(502) 564-3999

DEP7007B

Manufacturing or Processing Operations

- ☐ Section B.1: Process Information
☐ Section B.2: Materials and Fuel Information
☐ Section B.3: Notes, Comments, and Explanations

Additional Documentation

☐ Complete DEP7007AI, DEP7007N,
DEP7007V, and DEP7007GG.

☐ Attach a flow diagram

☐ Attach SDS

Source Name:

Republic Services of Kentucky, LLC d/b/a Valley View Landfill

KY EIS (AFS) #:

21- 223-00005

Permit #:

V-18-038

Agency Interest (AI) ID:

4059

Date:

6/30/2023**Section B.1: Process Information**

Emission Unit #	Emission Unit Name	Describe Emission Unit	Process ID	Process Name	Manufacturer	Model No.	Proposed/Actual Date of Construction Commencement (MM/YYYY)	Is the Process Continuous or Batch?	Number of Batches per 24 Hours (if applicable)	Hours per Batch (if applicable)
004a	MSW Landfill	Sanitary Landfilling of Municipal Solid Waste (MSW)	N/A	N/A	N/A	N/A	1983	Continuous	N/A	N/A

Section B.2: Materials and Fuel Information

**Maximum yearly fuel usage rate only applies if applicant request operating restrictions through federally enforceable limitations.*

Emission Unit #	Emission Unit Name	Name of Raw Materials Input	Maximum Quantity of Each Raw Material Input		Total Process Weight Rate for Emission Unit (tons/hr)	Name of Finished Materials	Maximum Quantity of Each Finished Material Output		Fuel Type	Maximum Hourly Fuel Usage Rate		Maximum Yearly Fuel Usage Rate		Sulfur Content (%)	Ash Content (%)
				(Specify Units/hr)				(Specify Units/hr)			(Specify Units)		(Specify Units)		
004a	MSW Landfill	Waste	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		

Section B.3: Notes, Comments, and Explanations

DEP FORM 7007J

Division for Air Quality 300 Sower Boulevard Frankfort, KY 40601 (502) 564-3999	DEP7007J Volatile Liquid Storage ☐ Section J.1: General Information ☐ Section J.2: Tank Description ☐ Section J.3: Gasoline Plants and Terminals ☐ Section J.4: Loading Rack(s) ☐ Section J.5: Equipment Leaks ☐ Section J.6: Notes, Comments, and Explanations	Additional Documentation ☐ Complete DEP7007AI, DEP7007N, DEP7007V, and DEP7007GG. ☐ SDS attached
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Source Name:	<u>Republic Services of Kentucky, LLC d/b/a Valley View Landfill</u>
KY EIS (AFS) #:	<u>21- 223-00005</u>
Permit #:	<u>V-18-038</u>
Agency Interest (AI) ID:	<u>4059</u>
Date:	<u>6/30/2023</u>

Section J.1: General Information						
Emission Unit #	Emission Unit Name	Emission Unit Description	Proposed/Actual Date of Construction Commencement (MM/YYYY)	Date of modification/reconstruction	Control Device ID	Stack ID
007	350 Gallon Gasoline Storage Tank & Dispensing	350 Gallon Gasoline Storage Tank	1998	N/A	007	N/A

Section J.2: Tank Description

Emission Point #: 007

Emission Point Name: 350 Gallon Gasoline Storage Tank & Dispensing

Tank ID#: GAS1

Date Installed: 1998

List Applicable Regulations: 40 CFR 63 Subpart CCCCCC

J.2A: Stored Liquid Data:

Single or Multi-Component Liquid Name(s)	Maximum Annual Throughput (gal/yr)	Liquid Density (lb/gal)	Molecular Weight of Single or Multi-Component Liquid	Percent Composition of Multi-Component Liquid(s)	Temperature (°F)		Vapor Pressure (psia)	
					Minimum	Maximum	Minimum	Maximum
Gasoline	10,000	6.2	92.0	N/A	51.5	61.0	4.4	5.3

J.2B: Tank Data:

Tank Capacity: (gallons)	<u>350 gallons</u>	Shell Height/ Length: (ft)	<u>5</u>	Shell Diameter: (ft)	<u>3.5</u>	Tank Turnovers per Year:	<u> </u>
Tank Orientation:	☒ Horizontal	☐ Vertical	If Vertical, provide Maximum Liquid Height: (ft) <u> </u>			Average Liquid Height: (ft) <u> </u>	
Shell Color/Shade:	☐ Red	☒ White	☐ Light Gray	☐ Medium Gray	☐ Aluminum Specular	☐ Aluminum Diffuse	☒ Other: Brown__
Roof Color:	☐ Slack	☒ White	☐ Light Gray	☐ Medium Gray	☐ Aluminum Specular	☐ Aluminum Diffuse	☐ Other: _____
Tank Type:	☒ Fixed Roof	☐ Internal Floating Roof	☐ External Floating Roof		☐ Pressure Tank		

J.2C: For Fixed Roof Tanks:

Roof Type:	☐ Dome	☒ Flat	☐ Cone	Dome/Cone Height:	<u> </u> ft	Average Vapor Space Height:	<u> </u> ft
Is Tank Underground?:	☐ Yes	☒ No	Roof Condition:	☒ Good	☐ Poor	Vacuum Setting:	<u> </u> psig
Is Tank Heated?:	☐ Yes	☒ No	Shell Condition:	☒ Good	☐ Poor	Pressure Setting:	<u> </u> psig

J.2D: For All Internal Floating Roof Tanks:

Rim Seal Description:	☐ Vapor Mounted Primary	☐ Vapor Mounted Primary plus Secondary Seal	☐ Shoe Mounted
	☐ Liquid Mounted Primary	☐ Liquid Mounted Primary plus Secondary Seal	☐ Shoe Mounted plus Secondary Seal
Secondary Seal:	☐ Rim Mounted	☐ Shoe Mounted	☐ None
Internal Shell Condition:	☐ Light Rust	☐ Dense Rust	☐ Gunitite-lined
	External Shell Condition: ☐ Good ☐ Poor		
Roof Paint Condition:	☐ Good	☐ Poor	Self Supporting Roof? ☐ Yes ☐ No
Number of Support Columns:	<u> </u>	Effective Column Diameter: <u> </u> ft	

J.2E: Deck Data for Internal Floating Roofs:

Length of Deck Seam: _____ ft

Deck Type: ☐ Bolted ☐ Welded

Type of Deck Fitting: ☐ Access Hatch ☐ Ladder Well ☐ Sample Pipe ☐ Sample Well ☐ Vacuum Breaker
☐ Column Well ☐ Roof Leg ☐ Hanger Well ☐ Stub Drain ☐ Automatic Gauge Float Well

Design of each deck fitting:

(diameter sizes, bolted or gasket covers, sliding cover or fabric seal,
adjustable or fixed roof leg/hanger well and number)

J.2F: For All External Floating Roof Tanks:

Rim Seal Description: ☐ Vapor Mounted Primary ☐ Vapor Mounted Primary Rim Secondary Seal ☐ Vapor Mounted Primary with Weather Shield
☐ Liquid Mounted Primary ☐ Liquid Mounted Primary Rim Secondary Seal ☐ Liquid Mounted Primary with Weather Shield
☐ Shoe Mounted Primary ☐ Shoe Mounted Primary Rim Secondary Seal ☐ Shoe Mounted Primary Shoe Secondary

Internal Shell Condition: ☐ Light Rust ☐ Dense Rust ☐ Gunite-linedTank Type: ☐ Riveted ☐ WeldedRoof Type: ☐ Pontoon Roof ☐ Double Deck Roof**J.2G: Deck Data for External Floating Roof Tanks:**

Type of Deck Fitting: ☐ Access Hatch ☐ Gauge Hatch ☐ Sample Well ☐ Roof Leg ☐ Vacuum Breaker
☐ Guide Pole ☐ Gauge Float ☐ Roof Drain ☐ Rim Vent ☐ Other

Design of each deck fitting:

(diameter sizes, bolted or gasket covers, sliding cover, unslotted or slotted
guide pole well, adjusted or fixed roof leg and number of each design)

J.2H: Emissions Data:**Attach SDS/Composition Analysis for Each Component Listed**

Process ID	Component Name	Process Name (e.g. Breathing, Working, Cleaning, Flashing Loss(es))	Lost Emissions (lb/1000 gal)	Frequency of Occurrence	Determination Methodology for Each Type of Loss*
1	Gasoline	Breathing	179	Continuous	KDEP EIS
2	Gasoline	Working	7.82	When tank is filled or used	KDEP EIS

Section J.3: Gasoline Plants and Terminals

Indicate the percentage of one or more of the following modes of transportation for incoming liquid and outgoing liquid:

	Tank Truck	Trailer	Railcar	Pipeline	Marine Tank	Barge	Other (Specify)
Incoming Liquid Material:	100%	N/A	N/A	N/A	N/A	N/A	
Outgoing Liquid Material:	N/A	N/A	N/A	N/A	N/A	N/A	

For Gasoline Dispensing Facilities (GDF) only:

Is the loading of gasoline storage tanks at a GDF located at an area source of hazardous air pollutants as defined in 40 CFR 63.2? ☒ Yes ☐ No

Is there the dispensing of gasoline from a fixed storage tank at a GDF into a portable tank for the on-site delivery and subsequent dispensing into gasoline-fueled equipment? ☒ Yes ☐ No

Maximum monthly throughput in gallons: Less than 10,000 gallons

For Bulk Gasoline Plants Only:

Is the maximum calculated design throughput less than 20,000 gallons (75,700 liters) per day? ☐ Yes ☐ No

Is gasoline loaded into cargo tanks for transport to gasoline dispensing facilities? ☐ Yes ☐ No

For Bulk Gasoline Terminals Only:

Is the maximum calculated design throughput equal to or greater than 20,000 gallons (75,700 liters) per day? ☐ Yes ☐ No

Is the terminal located at an area source of hazardous air pollutants as defined in 40 CFR 63.2?

☐ Yes

☐ No

Does the facility load from marine tank vessel loading operations at all loading berths less than 1.6 billion liters (10 M barrels) of gasoline annually and of less than 32 billion liters (200 M barrels) of crude oil annually?

☐ Yes

☐ No

Does the terminal handle any reformatted or oxygenated gasoline containing methyl tertbutyl ether (MTBE), CF?

☐ Yes

☐ No

Indicate the type of vapor control device utilized: ☐ Incinerator

☐ Adsorber

☐ Other

Section J.4: Loading Rack(s)

Emission Point #: _____

Emission Point Name: _____

Loading Rack ID#: _____

Product Type	Number of Lanes/Rack	Number of risers/loading arms per rack	Does the petroleum storage capacity exceed 300,000 barrels? (Y/N)	Time required to load standard size tanker (minutes)	Barge/Pipeline Unloading Rate (barrels/hr)	Barge/Pipeline Unloading Rate (barrels/yr)	Maximum Loaded (gal/hr)	Maximum Loaded (gal/yr)	Stack ID	Control Device ID

Section J.5: Equipment Leaks

Emission Point #: _____

Emission Point Name: _____

This section is to be completed for all components of Volatile Liquid Storage Systems that may have leaks.

Equipment Type	Indicate the number of each type of equipment for this emission point		Emission Factor (lb/SCC units)		Source of Emission Factor	Total Emissions (lb/yr)
	Gasoline	Other (diesel, kerosene, etc.)	Gasoline	Other		
Valves						
Pumps						
Connectors						
Risers/Loading-Arm Valves						
Open-ended Lines						
Other						

Section J.6: Notes, Comments, and Explanations

DEP FORM 7007N

Division for Air Quality 300 Sower Boulevard Frankfort, KY 40601 (502) 564-3999	DEP7007N Source Emissions Profile ___ Section N.1: Emission Summary ___ Section N.2: Stack Information ___ Section N.3: Fugitive Information ___ Section N.4: Notes, Comments, and Explanations	Additional Documentation ___ Complete DEP7007AI
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Source Name:	Republic Services of Kentucky, LLC d/b/a Valley View Landfill
KY EIS (AFS) #:	21- 223-00005
Permit #:	V-18-038
Agency Interest (AI) ID:	4059
Date:	6/30/2023

N.1: Emission Summary

Emission Unit #	Emission Unit Name	Process ID	Process Name	Control Device Name	Control Device ID	Stack ID	Maximum Design Capacity (SCC Units/hour)	Pollutant	Uncontrolled Emission Factor (lb/SCC Units)	Emission Factor Source (e.g. AP-42, Stack Test, Mass Balance)	Capture Efficiency (%)	Control Efficiency (%)	Hourly Emissions		Annual Emissions	
													Uncontrolled Potential (lb/hr)	Controlled Potential (lb/hr)	Uncontrolled Potential (tons/yr)	Controlled Potential (tons/yr)
See	Attachment	for	N1													

Section N.2: Stack Information**UTM Zone:**

Stack ID	Identify all Emission Units (with Process ID) and Control Devices that Feed to Stack	Stack Physical Data			Stack UTM Coordinates		Stack Gas Stream Data		
		Equivalent Diameter (ft)	Height (ft)	Base Elevation (ft)	Northing (m)	Easting (m)	Flowrate (acfm)	Temperature (° F)	Exit Velocity (ft/sec)
FLR	Emissions Unit 004a (MSW Landfill) and Emissions Unit 001a (Flare)	1.17	45	770			4600 scfm	1200	Meets 40 CFR 60.18 & 40 CFR 63.11

Attachment for KDEP Form 7007 N1

Emission Unit #	Emission Unit Name	Process ID	Process Name	Control Device Name	Control Device ID	Stack ID	Maximum Design Capacity (SCC Units/hour)	Pollutant	Uncontrolled Emission Factor (lb/SCC Units)	Emission Factor Source (e.g. AP-42, Stack Test, Mass Balance)	Capture Efficiency (%)	Control Efficiency (%)	Hourly Emissions		Annual Emissions		
													Uncontrolled Potential (lb/hr)	Controlled Potential (lb/hr)	Uncontrolled Potential (tons/yr)	Controlled Potential (tons/yr)	
001a	Open Flare	1	LFG Combustion	N/A - flare IS a control device	N/A	None	4,600 cfm	NOx	60.16 lbs/mmscf	KDEP EIS	N/A	N/A	16.60	16.60	72.73	72.73	
								CO	200.52 lbs/mmscf				55.34	55.34	242.40	242.40	
								VOC	119.10 lbs/mmscf				32.87	0.66	143.98	2.88	
								PM	17 lbs/mmscf	Site-Specific Tested Value			N/A	4.69	4.69	20.55	20.55
								SO ₂	11.57 lbs/mmscf ¹					3.19	3.19	13.99	13.99
004a	MSW Landfill ²	1	Landfilling of MSW Waste	Open Flare	001a	None	21,880,394 Mg	VOC	132.86 lbs/mmscf produced	KDEP EIS	75.00%	98.00%	45.28	11.32	99.16	49.58	
003	Unpaved and Paved Haul Roads (MSW LF)	1	Unpaved Roads	Dust Suppression (Water Truck)	WT- Water Truck	N/A - Fugitive	97,728 VMT ³	PM2.5	0.1407 lb/VMT	KDEP EIS	N/A	40.00%	N/A	N/A	6.88	4.13	
								PM10	5.32 lb/VMT						259.96	26.00	
								PM	5.32 lb/VMT						259.96	26.00	
		2	Paved Roads				32,836 VMT ³	PM2.5	0.0748 lb/VMT						1.23	0.74	
								PM10	0.3047 lb/VMT						5.00	0.50	
								PM	1.5234 lb/VMT			90.00%		25.01	2.50		
007	Gasoline Storage Tank	1	Breathing Loss	None	N/A	None - tank vent	10,000 gallons/year through a 350 gallon tank	VOC	179 lbs/1000 gallons	KDEP EIS	N/A	N/A	0.20	0.20	0.90	0.90	
		2	Working Loss						7.82 lbs/1000 gallons				0.01	0.01	0.04	0.04	
008	3 Leachate Storage Tanks	1	Storage of Landfill Leachate	None	N/A	None - tank vent	No Limits in Permit ⁴	VOC	0.0000001 lbs/gallon	KDEP EIS	N/A	N/A	0.001	0.001	0.003	0.003	
006	Solidification	1	Liquid Waste	None	N/A	N/A - Fugitive	15,000 tons/year liquid waste	VOC	.2976 lbs/ton material processed	KDEP EIS	N/A	N/A	N/A	N/A	2.23	2.23	
								Chlorobenzene	.02043 lbs/ton material processed						0.15	0.15	
005	Heavy Equipment	1	Compactors and Dozers	Dust Suppression (Water Truck)	WT- Water Truck	N/A - Fugitive	550,000 tons/year of waste processed ⁵	PM10	0.183 lb/ton material processed	KDEP EIS	N/A	90.00%	N/A	N/A	50.33	5.03	
								PM							50.33	5.03	

¹Updated based on highest site-specific sulfur value measured over the last five years.²Landfill emissions rates are based on 550,000 tons/year accepted through the facility's closure date of 2045.³Values for paved/unpaved road VMT based on off-permit change submitted to KDEP 3/14/22 and approved 5/12/22 (longer road distances and waste throughput of 550,000 tons/year).⁴Assumed 50,000,000 gallons leachate throughput per year (double the highest volume in the past two years).

Section N.3: Fugitive Information

UTM Zone:

Emission Unit #	Emission Unit Name	Process ID	Area Physical Data		Area UTM Coordinates		Area Release Data	
			Length of the X Side (ft)	Length of the Y Side (ft)	Northing (m)	Easting (m)	Release Temperature (°F)	Release Height (ft)
001a	Open Flare							
004a	MSW Landfill							
004b	Paved Haul Roads							
004b	Unpaved Haul Roads							
005	Site construction/Operation							
006	Industrial Waste Solidification Process							
007	350 Gallon Gasoline Storage Tank							

Section N.4: Notes, Comments, and Explanations

DEP FORM 7007V

Division for Air Quality 300 Sower Boulevard Frankfort, KY 40601 (502) 564-3999	DEP7007V Applicable Requirements and Compliance Activities ☐ Section V.1: Emission and Operating Limitation(s) ☐ Section V.2: Monitoring Requirements ☐ Section V.3: Recordkeeping Requirements ☐ Section V.4: Reporting Requirements ☐ Section V.5: Testing Requirements ☐ Section V.6: Notes, Comments, and Explanations	Additional Documentation ___ Complete DEP7007AI					
Source Name: Republic Services of Kentucky, LLC d/b/a Valley View Landfill KY EIS (AFS) #: 21- 223-00005 Permit #: V-18-038 Agency Interest (AI) ID: 4059 Date: 6/30/2023							
Section V.1: Emission and Operating Limitation(s)							
Emission Unit #	Emission Unit Description	Applicable Regulation or Requirement	Pollutant	Emission Limit (if applicable)	Voluntary Emission Limit or Exemption (if applicable)	Operating Requirement or Limitation (if applicable)	Method of Determining Compliance with the Emission and Operating Requirement(s)
001a	Open Flare	401 KAR 63:015	Opacity	Visible emissions shall not exceed 20% opacity for >3 minutes during any one day			Visual observations
001a	Open Flare	40 CFR Part 62 Subpart OOO & 40 CFR 60.18; 40 CFR 63 Subpart AAAA & 40 CFR 63.11	Visual Emissions	VE <5 minutes in 2 hours			Visual observations
004a	Landfill	40 CFR Par 6 Subpart AAAA	NMOC	Multiple Requirements			Wellhead readings and surface monitoring

Emission Unit #	Emission Unit Description	Applicable Regulation or Requirement	Pollutant	Emission Limit (if applicable)	Voluntary Emission Limit or Exemption (if applicable)	Operating Requirement or Limitation (if applicable)	Method of Determining Compliance with the Emission and Operating Requirement(s)
Insignificant	Leachate Tanks	40 CFR 60 Subpart Kb	VOC	Vapor pressure <3.5kPA			Leachate is mostly water; negligible vapor pressure
004b	Haul Roads	401 KAR 63:010	Fugitive Dust	No fugitive VE Past Property Line			Daily visual observations when site is open
005	Site Construction	401 KAR 63:010	Fugitive Dust	Prevent airborne PM			Daily visual observations when site is open
006	Industrial Waste Solidification Process	401 KAR 63:010	Fugitive Emissions	Liquid waste <15,000 tons/yr	Voluntary (established by permit)		Monthly gallons/tons of each industrial waste added, HAPs emissions based on rolling 12-month basis
007	350 Gallon Gasoline Storage Tank & Dispensing	40 CFR 63 Subpart CCCCCC	HAPs	<10,000 gallons per year dispensed	Voluntary. Regulatory level is <10,000 gallons/month to meet control exclusions.		Monitor annual gasoline throughput in gallons

Section V.2: Monitoring Requirements

Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Monitored	Description of Monitoring
001a	Open Flare	Visible Emissions	401 KAR 63:015	Visual Emissions	Weekly VE observations
001a	Open Flare	N/A	40 CFR 63 Subpart AAAA	Flow and Flame Presence	Measure flow and flame presence continuously
004a	MSW Landfill	NMOC	40 CFR 63 Subpart AAAA	NMOC	Wellehad readings monthly, cover integrity monitoring monthly, and quarterly surface emissions monitoring
004B & 005	Paved & Unpaved Haul Roads, Construction	Fugitive MP	401 KAR 63:010	Fugitive Dust	Daily visual observations when site is open
006	Industrial Waste Solidification Process	Fugitive Emissions	401 KAR 63:010	Waste Volumes	Monthly gallons/tons of each industrial waste added, HAPs emissions based on rolling 12-month basis
007	350 Gallon Gasoline Storage Tank & Dispensing	HAPs	40 CFR 63 Subpart CCCCCC	Gasoline Volumes	Monitor annual gasoline throughput in gallons

Section V.3: Recordkeeping Requirements

Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Recorded	Description of Recordkeeping
001a	Open Flare	Visible Emissions	401 KAR 63:015	Visual Emissions	Keep records of weekly VE observations
001a	Open Flare	N/A	40 CFR 63 Subpart AAAA	Flow and Flame Presence	Record flow and flame presence every 15 minutes
004a	MSW Landfill	NMOC	40 CFR 63 Subpart AAAA	NMOC	Wellhead readings and surface monitoring (electronic)
004B & 005	Paved & Unpaved Haul Roads, Construction	Fugitive MP	401 KAR 63:010	Fugitive Dust	Keep records of daily fugitive dust observations
006	Industrial Waste Solidification Process	Fugitive Emissions	401 KAR 63:010	Waste Volumes	Maintain records of monthly gallons/tons of each industrial waste added, HAPs emissions based on rolling 12-month basis
007	350 Gallon Gasoline Storage Tank & Dispensing	HAPs	40 CFR 63 Subpart CCCCCC	Gasoline Volumes	Maintain records of gasoline throughput, provide to Administrator within 24 hours of request

Section V.4: Reporting Requirements

Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Reported	Description of Reporting
001a	Open Flare	Visible Emissions	401 KAR 63:015	Visual Emissions	Semiannual Title 5 Operating Report
001a	Open Flare	N/A	40 CFR 63 Subpart AAAA	Flow and Flame Presence	Semiannual Title 5 Operating Report & Semiannual NESHAP Report
004a	MSW Landfill	NMOC	40 CFR 63 Subpart AAAA	NMOC	Semiannual Title 5 Operating Report & Semiannual NESHAP Report
004B & 005	Paved & Unpaved Haul Roads, Construction	Fugitive MP	401 KAR 63:010	Fugitive Dust	Semiannual Title 5 Operating Report
006	Industrial Waste Solidification Process	Fugitive Emissions	401 KAR 63:010	Waste Volumes	Semiannual Title 5 Operating Report
007	350 Gallon Gasoline Storage Tank & Dispensing	HAPs	40 CFR 63 Subpart CCCCCC	Gasoline Volumes	Semiannual Title 5 Operating Report
ALL	ALL	ALL	401 KAR 52:020	ALL	Annual Emissions Report
004a	MSW Landfill	N/A	40 CFR 62 Subpart OOO	Liquid volumes recirculated	Annual Liquid Additions Report

Section V.5: Testing Requirements

Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Tested	Description of Testing
001a	Open Flare	NMOC	40 CFR 60.18 & 40 CFR 63.11	VE, Exit Velocity, Net Heating Value	One-time initial performance test using EPA Method 22, a calibrated flow meter, and, EPA Method 3
004a	MSW Landfill	Sulfur	401 KAR 50:045	Sulfur	Collect annual sulfur sample for lab analysis. Conduct stain tube analysis quarterly for sulfur content.
004B & 005	Paved & Unpaved Haul Roads, Construction	Fugitive PM	401 KAR 63:010	None	
006	Industrial Waste Solidification Process	Futgitive Emissions	401 KAR 63:010	None	
007	350 Gallon Gasoline Storage Tank & Dispensing	HAPs	40 CFR Subpart CCCCCC	None	

Section V.6: Notes, Comments, and Explanations

DEP FORM 7007CC

Division for Air Quality Submit to the Regional Office identified in your permit	DEP7007CC Compliance Certification _____ Section CC.1: Source Information _____ Section CC.2: Signature Block _____ Section CC.3: Identification of Emission Units & Each Term or Condition of the Permit _____ Section CC.4: Notes, Comments, and Explanations
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Section CC.1: Source Information

1) Source Name Valley View Landfill	2) Agency Interest (AI) ID 4059	
3) Source Location Address (street, city, state, zip) 1920 Sulphur Road, Sulphur, KY 40070		
4) Technical Contact (name, e-mail, phone #) Branham Lafferty, Blafferty@republicservices.com, (618) 936-4379		
5) Permit Number(s) V-18-038	6) County Trimble	7) KY EIS (AFS) # 21- 223-00005

8) Submittal Information

Are you certifying any requirement(s) as "not in continuous compliance?"
 ☐ Yes
 ☒ No
 What is the reporting period?
 _____ N/A _____ TO _____ N/A _____

mm/ dd/ yy
mm/ dd/ yy

Section CC.2: Signature Block

9) CERTIFICATION SIGNATURE

I, THE UNDERSIGNED, HEREBY CERTIFY UNDER PENALTY OF LAW, THAT I AM A RESPONSIBLE OFFICIAL, AND THAT I HAVE PERSONALLY EXAMINED, AND AM FAMILIAR WITH, THE INFORMATION SUBMITTED IN THIS DOCUMENT AND ALL ITS ATTACHMENTS. BASED ON MY INQUIRY OF THOSE INDIVIDUALS WITH PRIMARY RESPONSIBILITY FOR OBTAINING THE INFORMATION, I CERTIFY THAT THE STATEMENTS AND INFORMATION IS ON KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE OR INCOMPLETE INFORMATION, INCLUDING THE POSSIBILITY OF FINE OR IMPRISONMENT.

BY: _____ AUTHORIZED SIGNATURE Branham Lafferty _____ TYPED OR PRINTED NAME OF SIGNATORY	06/30/2023 _____ DATE Environmental Manager _____ TITLE OF SIGNATORY
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Section CC.3: Identification of Emission Units & Each Term or Condition of the Permit

Emission Units in Continuous Compliance

10a) Emission Units in Continuous Compliance. *The following emission units were in continuous compliance with each permit term or condition(s) and applicable requirements listed here, such as emission standards, emission control requirements, emission testing, court requirements, work practices, or enhanced monitoring, based on the compliance methods specified below. If additional space is required, reproduce this page as needed.*

Emission Unit/Permit ID#	Permit Term, Condition, or Applicable Regulation	Emission Unit Description	Permit Limit or requirement	Actual Emissions or status of requirement	The method used for determining compliance over the reporting period, and whether the method provided continuous or intermittent data. (such as test methods, monitoring procedures, recordkeeping and reporting)
004a	Section B, Condition 1.a.A. - B., 1.d, 1.h-j (Operating Limitations/Compliance Demonstration), 40 CFR 60.752(b), 60.755(b) & 60.759(a) & (b)	Municipal Solid Waste (MSW) Landfill	Design gas system to meet NSPS criteria; install wells in areas requiring control; calculate max gas flow rate	Not Applicable	N/A - Title 5 Air Operating Permit Renewal Application
004a	Section B, Condition 1.a.C & D, 1.e, 1.f, 3.a & b., 4.a & c .i - iii, 5.e (Op Limit/Comp Demon., Testing, Monitoring Reqmts, Records), 40 CFR 60.753, 60.755 & 60.758	Landfill Gas Collection System	Monitor all wells monthly for pressure, O2 or N2, temp. w/allowable methods. Correct exceedances. Keep records.	Not Applicable	N/A - Title 5 Air Operating Permit Renewal Application
001a	Section B, Condition 1.b.i & c (Operating Limitations), 40 CFR 60.752(b), 60.753, 60.755 & 60.756	Landfill Gas Open Flare and Gas Collection System	Control collected gas w/ open flare, encl. comb. or treat. syst. Operate in accordance w/NSPS	Reported annually in emissions report	N/A - Title 5 Air Operating Permit Renewal Application
001a	Section B, 1.g, 7.a, b, e & h (Operating Limits/Control Equipment), 40 CFR 60.753(e) & (f) & 60.755(e)	Landfill Gas Open Flare	NSPS applies at all times except during SSM events. Operate with flame present; close valves within 1 hour if flare inoperable	Not Applicable	N/A - Title 5 Air Operating Permit Renewal Application
004a	Section B, Condition 1.k (Operating Limitations), 40 CFR 61.154	Municipal Solid Waste (MSW) Landfill	Cover asbestos waste w/6 in. non-asbestos material by end of working day	None	N/A - Title 5 Air Operating Permit Renewal Application
004a	Section B, Condition 1.I & 5.j (Operating Limitations, recordkeeping), 40 CFR 63.6, 63.1960	Municipal Solid Waste (MSW) Landfill	Develop a written Startup, Shutdown and Malfunction Plan; maintain on site.	Not Applicable	N/A - Title 5 Air Operating Permit Renewal Application

Section CC.3: Identification of Emission Units & Each Term or Condition of the Permit***Emission Units in Continuous Compliance***

10a) Emission Units in Continuous Compliance. *The following emission units were in continuous compliance with each permit term or condition(s) and applicable requirements listed here, such as emission standards, emission control requirements, emission testing, court requirements, work practices, or enhanced monitoring, based on the compliance methods specified below. If additional space is required, reproduce this page as needed.*

Emission Unit/Permit ID#	Permit Term, Condition, or Applicable Regulation	Emission Unit Description	Permit Limit or requirement	Actual Emissions or status of requirement	The method used for determining compliance over the reporting period, and whether the method provided continuous or intermittent data. (such as test methods, monitoring procedures, recordkeeping and reporting)
004a	Section B, Condition 1.m (Operating Limitations), 40 CFR 60 Subpart XXX	Municipal Solid Waste (MSW) Landfill	Obtain air permit incorporating Subpart XXX requirements if site expands landfill	N/A	N/A - Title 5 Air Operating Permit Renewal Application
004a	Section B, Condition 2.a, 3.e & f, 4.d (Emissions Limits, Testing, Monitoring Reqmts), 40 CFR 60.753(d), 60.755(c)	Municipal Solid Waste (MSW) Landfill	Surface CH4 ems < 500 ppm except during SSM events. Monitor quarterly, follow Method 21 procedures	<500 ppm	N/A - Title 5 Air Operating Permit Renewal Application
001a	Section B, Condition 2.b & 3.g (Emissions Limits, Testing), 40 CFR 60 Subpart WWW, 40 CFR 60.18	Landfill Gas Open Flare	No VE except for 5 minutes in 2 hours	None observed during Initial NSPS Performance Test	N/A - Title 5 Air Operating Permit Renewal Application
001a	Section B, Condition 2.c, 4.f & 5.l (Emissions Limits, Monitoring & Recordkeeping), 401 KAR 63:015 Section 3	Landfill Gas Open Flare	Flare PM < 20% opacity except for 3 minutes/day; Weekly VE Survey; Method 9 if VE detected > limits	None observed	N/A - Title 5 Air Operating Permit Renewal Application
N/A	Section B, Condition 1.b.ii-iii, 3.c, 7.d (Operational Limits, Testing, Control Equipment), 40 CFR 60.752(b)(2)(iii)(b) & (c)	LFG Enclosed Combustor & Treatment Systems or Other Control Equipment	Control System D.E. 98% or NMOC Outlet Concentration < 20 ppm as hexane, 3% O2, or Other	N/A	N/A - Title 5 Air Operating Permit Renewal Application
001a	Section B, Condition 3.d, h & 7.f (Testing, Control Equip.), 40 CFR 60 Subpart WWW, 40 CFR 60.18	Landfill Gas Open Flare	Calculate net heating value of gas using Method 3C, three samples over 1/2 hour	N/A - net heating value was greater than required minimum value	N/A - Title 5 Air Operating Permit Renewal Application

Section CC.3: Identification of Emission Units & Each Term or Condition of the Permit

Emission Units in Continuous Compliance

10a) Emission Units in Continuous Compliance. *The following emission units were in continuous compliance with each permit term or condition(s) and applicable requirements listed here, such as emission standards, emission control requirements, emission testing, court requirements, work practices, or enhanced monitoring, based on the compliance methods specified below. If additional space is required, reproduce this page as needed.*

Emission Unit/Permit ID#	Permit Term, Condition, or Applicable Regulation	Emission Unit Description	Permit Limit or requirement	Actual Emissions or status of requirement	The method used for determining compliance over the reporting period, and whether the method provided continuous or intermittent data. (such as test methods, monitoring procedures, recordkeeping and reporting)
001a	Section B, Condition 3.i, j & 7.f (Testing, Control Equip.), 40 CFR 60 Subpart WWW, 40 CFR 60.18	Landfill Gas Open Flare	Calculate exit velocity; maximum cannot exceed limits of 40 CFR 60.18	N/A - exit velocity met 60.18 requirements	N/A - Title 5 Air Operating Permit Renewal Application
004a	Section B, Condition 3.k, 6.k & 6.l (Testing & Reporting), 401 KAR 50:045	Municipal Solid Waste (MSW) Landfill	Sample for H2S quarterly with stain tubes & annual with analytical samples (3) - Submit results	N/A	N/A - Title 5 Air Operating Permit Renewal Application
004a	Section B, Condition 3.l (Testing)	Municipal Solid Waste (MSW) Landfill	Notify appropriate field agency 5 days prior to performing a surface scan.	Not Applicable	N/A - Title 5 Air Operating Permit Renewal Application
All	Section B, Condition 3.m (Testing)	All	Conduct Performance Testing required by Division using reference methods in 401 KAR 50:015.	Not Applicable	N/A - Title 5 Air Operating Permit Renewal Application
004a	Section B, Condition 4.b (Monitoring), 40 CFR 60.755(c)(5)	Municipal Solid Waste (MSW) Landfill	Conduct monthly cover integrity monitoring & implement repairs as needed	Not Applicable	N/A - Title 5 Air Operating Permit Renewal Application
004a	Section B, Condition 4.e & 5.k (Monitoring & Recordkeeping)	Municipal Solid Waste (MSW) Landfill	Measure liquid levels quarterly in all gas wells; maintain records & calculations as specified in permit	Not Applicable	N/A - Title 5 Air Operating Permit Renewal Application

Section CC.3: Identification of Emission Units & Each Term or Condition of the Permit

Emission Units in Continuous Compliance

10a) Emission Units in Continuous Compliance. *The following emission units were in continuous compliance with each permit term or condition(s) and applicable requirements listed here, such as emission standards, emission control requirements, emission testing, court requirements, work practices, or enhanced monitoring, based on the compliance methods specified below. If additional space is required, reproduce this page as needed.*

Emission Unit/Permit ID#	Permit Term, Condition, or Applicable Regulation	Emission Unit Description	Permit Limit or requirement	Actual Emissions or status of requirement	The method used for determining compliance over the reporting period, and whether the method provided continuous or intermittent data. (such as test methods, monitoring procedures, recordkeeping and reporting)
004a	Section B, Condition 5.a. & b.i (Specific Recordkeeping Requirements), 40 CFR 60.758(a) & (b)	Municipal Solid Waste (MSW) Landfill	Maintain design capacity, solid waste, well density, performance test, control specifications	Not Applicable	N/A - Title 5 Air Operating Permit Renewal Application
001a	Section B, Conditions 5.b.ii, c.ii, 7.c.i, 7.i (Recordkeeping, Control Equip), 40 CFR 60.758(b)(4), 60.756(b) & (c)	Landfill Gas Open Flare	Use heat sensing device to detect flame, keep records of flame presence	Not Applicable	N/A - Title 5 Air Operating Permit Renewal Application
001a	Section B, Condition 5.b.ii, c.i, 7.c.ii (Recordkeeping, Control Equip), 40 CFR 60.758(b)(4), 60.756(b) & (c)	Landfill Gas Open Flare	Install & maintain gas flow device recording flow to control device every 15 minutes; keep records of flow	Not Applicable	N/A - Title 5 Air Operating Permit Renewal Application
004a	Section B, Condition 5.d (Recordkeeping), 40 CFR 60.758(d)	Municipal Solid Waste (MSW) Landfill	Keep as-built map of existing and future gas system.	Not Applicable	N/A - Title 5 Air Operating Permit Renewal Application
004a	Section B, Condition 5.f - h (Recordkeeping), 40 CFR 61.154 & 61.151	Municipal Solid Waste (MSW) Landfill	Maintain WSR for asbestos receipts & map of disposal areas. Comply w/61.151 upon site closure.	Not Applicable	N/A - Title 5 Air Operating Permit Renewal Application
004a	Section B, Condition 6.a - c (Reporting), 40 CFR 60.756(e), 60.757(a), (b) & (c)	Municipal Solid Waste (MSW) Landfill	Submit Initial Design Capacity, NMOC Reports, alt. op. procedures for systems not meeting 60.759	Not Applicable	N/A - Title 5 Air Operating Permit Renewal Application

Section CC.3: Identification of Emission Units & Each Term or Condition of the Permit***Emission Units in Continuous Compliance***

10a) Emission Units in Continuous Compliance. *The following emission units were in continuous compliance with each permit term or condition(s) and applicable requirements listed here, such as emission standards, emission control requirements, emission testing, court requirements, work practices, or enhanced monitoring, based on the compliance methods specified below. If additional space is required, reproduce this page as needed.*

Emission Unit/Permit ID#	Permit Term, Condition, or Applicable Regulation	Emission Unit Description	Permit Limit or requirement	Actual Emissions or status of requirement	The method used for determining compliance over the reporting period, and whether the method provided continuous or intermittent data. (such as test methods, monitoring procedures, recordkeeping and reporting)
004a	Section B, Condition 6.e & j (Reporting), 40 CFR 60.757(f), 40 CFR 63.1980 & 63.10(d)	Municipal Solid Waste (MSW) Landfill	Submit semiannual NSPS, SSM reports & SSM non-procedures	Not Applicable	N/A - Title 5 Air Operating Permit Renewal Application
004a	Section B, Condition 6.j.i.2 & 3 (Specific Recordkeeping Requirements), 40 CFR 63.10(d) & 63.1965	Municipal Solid Waste (MSW) Landfill	Deviation if more than one 15 minute data point is missing per hour, or if SSM plan not followed.	Not Applicable	N/A - Title 5 Air Operating Permit Renewal Application
001a	Section B, Condition 6.f (Reporting), 40 CFR 60.8 & 60.757(g)	Landfill Gas Open Flare	Within 180 days of startup conduct/submit performance test. Include items in test report.	Within required 60.18 limits	N/A - Title 5 Air Operating Permit Renewal Application
004a	Section B, Condition 6.g & i (Reporting), 40 CFR 61.154	Municipal Solid Waste (MSW) Landfill	Notify agency of improperly enclosed asbestos, discrepancies; 45 day disturbance.	Not Applicable	N/A - Title 5 Air Operating Permit Renewal Application
001a	Section B, Condition 7.g (Control Equipment), 40 CFR 60.18(d)	Landfill Gas Open Flare	Monitor flare in accordance with 40 CFR 60 Subpart WWW	Not Applicable	N/A - Title 5 Air Operating Permit Renewal Application
004b & 005	Section B, Condition 1.a & b (Operating Limitations), 401 KAR 63:010	Paved and Unpaved Haul Roads & Site Construction/Operation	Take reasonable precautions to prevent fugitive PM from becoming airborne.	None	N/A - Title 5 Air Operating Permit Renewal Application

Section CC.3: Identification of Emission Units & Each Term or Condition of the Permit					
Emission Units in Continuous Compliance					
10a) Emission Units in Continuous Compliance. <i>The following emission units were in continuous compliance with each permit term or condition(s) and applicable requirements listed here, such as emission standards, emission control requirements, emission testing, court requirements, work practices, or enhanced monitoring, based on the compliance methods specified below. If additional space is required, reproduce this page as needed.</i>					
Emission Unit/Permit ID#	Permit Term, Condition, or Applicable Regulation	Emission Unit Description	Permit Limit or requirement	Actual Emissions or status of requirement	The method used for determining compliance over the reporting period, and whether the method provided continuous or intermittent data. (such as test methods, monitoring procedures, recordkeeping and reporting)
004b & 005	Section B, Conditions 2 & 4 (Emissions Limitations, Testing Requirements), 401 KAR 63:010	Paved and Unpaved Haul Roads & Site Construction/Operation	No VE leaving property. Perform VE for dust daily when site is operating	None	N/A - Title 5 Air Operating Permit Renewal Application
004b & 005	Section B, Condition 3 (Testing Requirements), 401 KAR 50:045	Paved and Unpaved Haul Roads & Site Construction/Operation	Conduct performance testing as required by KDEP	None	N/A - Title 5 Air Operating Permit Renewal Application
004b & 005	Section B, Condition 5 (Specific Recordkeeping Requirements), 401 KAR 52:020	Paved and Unpaved Haul Roads & Site Construction/Operation	Maintain log when dust suppression equipment is used; maintain records of VE inspections of lot line.	None	N/A - Title 5 Air Operating Permit Renewal Application
004b & 005	Section B, Condition 7 (Specific Recordkeeping Requirements), 401 KAR 52:020	Paved and Unpaved Haul Roads & Site Construction/Operation	Keep appropriate equipment for dust suppression on site and in working order.	Not Applicable	N/A - Title 5 Air Operating Permit Renewal Application
006	Section B, (Operating Limitations, Specific Monitoring Requirements, Specific Reporting Requirements Conditions 1.a, 4.a.b, 5 and 6) 401 KAR 63:010	Solidification Process	Keep monthly records showing gallons of liquid industrial wastes processed and the pounds of each HAP per gallon	Kept on file - calculated monthly	N/A - Title 5 Air Operating Permit Renewal Application
007	Section B, Conditions 1 - 6, 40 CFR 63.11124	Gasoline Storage Tank	Comply with 40 CFR 63 Subpart CCCCCC	Not Applicable	N/A - Title 5 Air Operating Permit Renewal Application

Section CC.3: Identification of Emission Units & Each Term or Condition of the Permit

Emission Units in Continuous Compliance

10a) Emission Units in Continuous Compliance. *The following emission units were in continuous compliance with each permit term or condition(s) and applicable requirements listed here, such as emission standards, emission control requirements, emission testing, court requirements, work practices, or enhanced monitoring, based on the compliance methods specified below. If additional space is required, reproduce this page as needed.*

Emission Unit/Permit ID#	Permit Term, Condition, or Applicable Regulation	Emission Unit Description	Permit Limit or requirement	Actual Emissions or status of requirement	The method used for determining compliance over the reporting period, and whether the method provided continuous or intermittent data. (such as test methods, monitoring procedures, recordkeeping and reporting)
ALL	Section D, Source Emission Limitations and Testing Requirements	ALL	Compliance is based on emissions and processing rates for 12 consecutive months	Emissions will be submitted in the annual inventory.	N/A - Title 5 Air Operating Permit Renewal Application
All	Section E - Source Control Equipment Requirements	All emission units	Maintain affected facility & pollution control equipment to minimize emissions	Not Applicable	N/A - Title 5 Air Operating Permit Renewal Application
General	Section F, Conditions 1-4, 7 & 8, KAR 52:020	All emission units	Recordkeeping, agency inspection requirements & emissions exceedance notifications	Not Applicable	N/A - Title 5 Air Operating Permit Renewal Application
General	Section F, Conditions 5 & 6, KAR 52:020	All emission units	Submission of semi-annual and annual reports	Not Applicable	N/A - Title 5 Air Operating Permit Renewal Application
General	Section F, Condition 9, KAR 52:020	All emission units	Submission of Annual Compliance Certification	Not Applicable	N/A - Title 5 Air Operating Permit Renewal Application
General	Section F, Condition 10, 401 KAR 52:020	All emission units	Submit annual emission report	As indicated on the annual report	N/A - Title 5 Air Operating Permit Renewal Application

Section CC.3: Identification of Emission Units & Each Term or Condition of the Permit					
Emission Units in Continuous Compliance					
10a) Emission Units in Continuous Compliance. <i>The following emission units were in continuous compliance with each permit term or condition(s) and applicable requirements listed here, such as emission standards, emission control requirements, emission testing, court requirements, work practices, or enhanced monitoring, based on the compliance methods specified below. If additional space is required, reproduce this page as needed.</i>					
Emission Unit/Permit ID#	Permit Term, Condition, or Applicable Regulation	Emission Unit Description	Permit Limit or requirement	Actual Emissions or status of requirement	The method used for determining compliance over the reporting period, and whether the method provided continuous or intermittent data. (such as test methods, monitoring procedures, recordkeeping and reporting)
General	Section G, Multiple requirements	All emission units	General Reqmnt's for permit modification, reopening, renewal, source testing, ozone & risk management regs	Not Applicable	N/A - Title 5 Air Operating Permit Renewal Application
004a	Section H, Multiple requirements	Municipal Solid Waste (MSW) Landfill	Alternate Operating Scenarios	None	N/A - Title 5 Air Operating Permit Renewal Application
004a	Updates to Landfill NESHAP (40 CFR 63 Subpart AAAA) effective 9/27/21	Municipal Solid Waste (MSW) Landfill	Multiple - permit will be updated during next renewal cycle.	Not Applicable	N/A - Title 5 Air Operating Permit Renewal Application
004a	Landfill Federal Plan (40 CFR 62 Subpart OOO) effective 6/21/21	Municipal Solid Waste (MSW) Landfill	Multiple - permit will be updated during next renewal cycle.	Not Applicable	N/A - Title 5 Air Operating Permit Renewal Application

Section CC.3: Identification of Emission Units & Each Term or Condition of the Permit***Emission Units Subject to Future Compliance Dates***

10b) Emission Units Subject to Future Compliance Dates. *The following emission units will achieve compliance on a timely basis and maintain compliance with future compliance dates as they become applicable during the permit term. If additional space is required, reproduce this page as needed.*

Emission Unit/Permit ID#	Future Compliance Schedule	Emission Unit Description	Reason for Future Compliance Date
004a	Section B, Condition 6.d (Reporting), 40 CFR 60.757: Submit closure report within 30 days of waste cessation	Municipal Solid Waste (MSW) Landfill	This condition only becomes applicable upon closure of the landfill, which did not occur during the reporting time frame. Note that closure report requirements are now found under both the revised Landfill NESHAP and the Federal Plan.
004a	Section B, Condition 6.h (Reporting), 40 CFR 61.154: submit copy of records of asbestos disposal location to Agency upon closure of landfill	Municipal Solid Waste (MSW) Landfill	This condition only becomes applicable upon closure of the landfill, which did not occur during the reporting time frame.
004a	Section H, Alternate Operating Scenario 1, 40 CFR 60.757: Submit equipment removal report once NMOC < 50 Mg/year	Municipal Solid Waste (MSW) Landfill	This condition only becomes applicable upon closure of the landfill, and demonstration that NMOC emissions have been reduced to less than 50 Mg/year through specified testing. Note: The Federal Plan (40 CFR 62 Subpart OOO) which became applicable on 6/21/2021 has a lower threshold of 34 mg/year NMOC to remove controls permanently.

Section CC.3: Identification of Emission Units & Each Term or Condition of the Permit***Emission Units Not in Continuous Compliance***

10c)(1) Emission Units Not in Continuous Compliance. *The following emission units were not in continuous compliance with each permit term or condition and applicable requirements listed here, such as emission standards, emission control requirements, emission testing, court requirements, work practices, or enhanced monitoring, based on the compliance methods specified below. If additional space is required, reproduce this page as needed.*

Emission Unit/Permit ID#	Permit Term, Condition, or Applicable Regulation	Emission Unit Description	Permit Limit or Requirement	Actual Emissions or Status of Requirement	The method used for determining compliance over the reporting period, and whether compliance was continuous or intermittent. <i>(such as test methods, monitoring procedures, recordkeeping and reporting)</i>
N/A					This form is being submitted to complete the facility's air operating permit renewal application (Title 5)

Section CC.3: Identification of Emission Units & Each Term or Condition of the Permit	
<i>Emission Units Not in Continuous Compliance (continued)</i>	
10c)(2) Emission Units Not in Continuous Compliance. <i>For the emission units and requirements listed in 10c)(1) that were not in continuous compliance since the last reporting period, state the duration, magnitude, and reason or reasons for non-compliance. Each row of 10c)(2) must relate to the corresponding row of 10c)(1). If additional space is required, reproduce this page as needed.</i>	
Emission Unit/Permit ID#	Description of duration, magnitude, and reason(s) for non-compliance and corrective steps taken or planned.
N/A	This form is being submitted to complete the facility's air operating permit renewal application (Title 5)

DEP FORM 7007DD

Division for Air Quality

300 Sower Boulevard
Frankfort, KY 40601
(502) 564-3999

DEP7007DD**Insignificant Activities**

___ Section DD.1: Table of Insignificant Activities

___ Section DD.2: Signature Block

___ Section DD.3: Notes, Comments, and Explanations

Source Name: Republic Services of Kentucky, LLC d/b/a Valley View Landfill

KY EIS (AFS) #: 21- 223-00005

Permit #: V-18-038

Agency Interest (AI) ID: 4059

Date: 6/30/2023

Section DD.1: Table of Insignificant Activities

*Identify each activity with a unique Insignificant Activity number (IA #); for example: 1, 2, 3... etc.

Insignificant Activity #	Description of Activity including Rated Capacity	Serial Number or Other Unique Identifier	Applicable Regulation(s)	Calculated Emissions
1	Leachate Storage tanks (100,000 gallons)		None	
2	Leachate Storage tank (140,000 gallons)		None	
3	Leachate Storage Tank (400,000 gallons)		None	
4	Frac Tank (21,000 gallons)		None	
5	Frac Tank (21,000 gallons)		None	

Insignificant Activity #	Description of Activity including Rated Capacity	Serial Number or Other Unique Identifier	Applicable Regulation(s)	Calculated Emissions
6	Propane Tank (50 gallons)		None	
7	Propane Tank (500 gallons)		None	
8	Propane Tank (500 gallons)		None	
9	Propane Tank (500 gallons)		None	
10	Propane Tank (1,000 gallons)		None	
11	Propane Tank (1,000 gallons)		None	
12	Diesel Storage Tank (300 gallons)		None	
13	Diesel Storage Tank (1,000 gallons)		None	
14	Diesel Storage Tank (10,000 gallons)		None	
15	One Parts cleaner		None	

Insignificant Activity #	Description of Activity including Rated Capacity	Serial Number or Other Unique Identifier	Applicable Regulation(s)	Calculated Emissions
Section DD.2: Signature Block				
I, THE UNDERSIGNED, HEREBY CERTIFY UNDER PENALTY OF LAW, THAT I AM A RESPONSIBLE OFFICIAL, AND THAT I HAVE PERSONALLY EXAMINED, AND AM FAMILIAR WITH, THE INFORMATION SUBMITTED IN THIS DOCUMENT AND ALL ITS ATTACHMENTS. BASED ON MY INQUIRY OF THOSE INDIVIDUALS WITH PRIMARY RESPONSIBILITY FOR OBTAINING THE INFORMATION, I CERTIFY THAT THE INFORMATION IS ON KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE OR INCOMPLETE INFORMATION, INCLUDING THE POSSIBILITY OF FINE OR IMPRISONMENT.				
By:			6/30/2023	
		Authorized Signature	Date	
		Branham Lafferty	Environmental Manager	
		Type/Print Name of Signatory	Title of Signatory	

Section DD.3: Notes, Comments, and Explanations

DEP FORM 7007GG

Division for Air Quality

300 Sower Boulevard

Frankfort, KY 40601

(502) 564-3999

DEP7007GG

Control Equipment

Additional Documentation

- ___ Complete Sections GG.1 through GG.12, as applicable
- ___ Attach manufacturer's specifications for each control device
- ___ Complete DEP7007AI

Source Name: Republic Services of Kentucky, LLC d/b/a Valley View Landfill

KY EIS (AFS) #: 21- 223-00005

Permit #: V-18-038

Agency Interest (AI) ID: 4059

Date: 6/30/2023

Section GG.1: General Information - Control Equipment

Control Device ID #	Control Device Name	Cost	Manufacturer	Model Name/ Serial #	Date Installed	Inlet Gas Stream Data For <u>All</u> Control Devices					Inlet Gas Stream Data For Condensers, Adsorbers, Afterburners, Incinerators, Oxidizers <u>Only</u>			Equipment Operational Data For <u>All</u> Control Devices		
						Temperature ($^{\circ}F$)	Flowrate (scfm @ 68 $^{\circ}F$)	Average Particle Diameter (μm)	Particle Density (lb/ft ³) or Specific Gravity	Gas Density (lb/ft ³)	Gas Moisture Content (%)	Gas Composition	Fan Type	Pressure Drop Range (in. H ₂ O)	Pollutants Collected/ Controlled	Pollutant Removal (%)
001a	Open Flare		LFG Specialties	PCF164OI12	2017	1200	4600			0.0744				1 - 10 in. H ₂ O	NMOC, CH ₄	98%

Section GG.2: Flare Source Information

Control Device ID #	Identify all Emission Units and Control Devices that Feed to Flare	Type of Flare (e.g. steam-assisted, air- assisted, nonassisted)	Process Gas Flowrate (<i>acfm</i>)	Net Heating Value of Stream(s) (Btu/scf)	Removal Efficiency (%)	Flare Rated Capacity (<i>MMBtu/hr</i>)
004a	Emissions Unit 004a - MSW Landfill	Non-assisted	4600	480.5 BTU/scf	98% (Methane, NMOC)	135.5

Section GG.3: Cyclone

Control Device ID #	Identify all Emission Units and Control Devices that Feed to Cyclone	Identify Number of Cyclones: Single <u>or</u> Multiple	Identify Type: High-Efficiency, Conventional, <u>or</u> High-Throughput	Inlet Height (ft)	Inlet Width (ft)	Bottom Cone Height (ft)	Body Height (ft)	Body Diameter (ft)	Dust Outlet Tube Diameter (ft)	Gas Outlet Tube Diameter (ft)	Vortex Finder Height (ft)

Section GG.4: Electrostatic Precipitator (ESP)

[illegible]

Section GG.5: Scrubber																		
Control Device ID #	Identify all Emission Units and Control Devices that Feed to Scrubber	Identify Type of Scrubber: Venturi, Packed Bed, Spray Tower, or Other (specify)	For Venturi Scrubbers:	For Packed Bed Scrubbers:		For Spray Towers:		Identify Type of Flow: Concurrent, Countercurrent, or Crossflow	Length in Direction of Gas Flow (ft)	Cross-Sectional Area (ft ²)	Venturi Throat Velocity (ft/s)	Mist Eliminator			Scrubbing Liquid			
			Identify Throat Type: Fixed or Adjustable	Identify Packing Type	Packing Height (in)	Number of Nozzles	Nozzle Pressure (psig)					Identify Type: Mesh or Vane	Cross-Sectional Area (ft ²)	Pressure Drop (in. H ₂ O)	Chemical Composition	Flowrate (gal/min)	Fresh Liquid Makeup Rate (gal/min)	Describe Disposal Method of Scrubber Effluent

Section GG.6: Filter														
Control Device ID #	Identify all Emission Units and Control Devices that Feed to Filter	Identify Type of Filter Unit: Baghouse, Cartridge Collector, or Other (specify)	Identify Type of Filtering Material: Fabric, Paper, Synthetic, or Other (specify)	Total Filter Area (ft ²)	Effective Air-to-Filter Ratio (acfm/ft ²)	Continuous Monitoring Instrumentation (e.g. COMS, BLDS, none)	Additional Materials Introduced into the Control System (e.g. lime, carbon)		Identify Cleaning Method: Shaker, Pulse Air, Reverse Air, Pulse Jet, or Other (specify)	Identify Gas Cooling Method: Ductwork, Heat Exchanger, Bleed-in Air, Water Spray, or Other (specify)	For Ductwork:		For Bleed-in Air:	For Water Spray:
							Material	Injection Rate (lb/hr)			Length (ft)	Diameter (ft)	Flowrate (scfm @ 68°F)	Flowrate (gal/min)

Section GG.7: Afterburner/Incinerator/Oxidizer

Control Device ID #	Identify all Emission Units and Control Devices that Feed to Afterburner/Incinerator/Oxidizer	Identify Type: Afterburner, Incinerator, Oxidizer, or Other (specify)	Number of Burners	Burner Rating (BTU/hr)	Dimensions of Combustion Chamber (specify units)	Residence Time (sec)	Combustion Chamber Temperature (°F)	Type of Catalyst (if applicable)	Type of Heat Exchanger (if applicable)	Auxiliary Fuel							Composition and Quantities of Combusted Waste
										Identify Fuel Type	Higher Heating Value (MMBtu/scf)	Hourly Fuel Usage (scf/hr)	% Sulfur (Maximum)	% Sulfur (Average)	% Ash (Maximum)	% Ash (Average)	

Section GG.8: Adsorber

Control Device ID #	Identify all Emission Units and Control Devices that Feed to Adsorber	Identify Adsorbate	Identify Adsorbent: Activated carbon, Activated alumina, Silica Gel, Synthetic Polymers, Zeolite, or Other (specify)	Dimensions of Each Bed				Type of Regeneration: Replacement, Steam, or Other (specify)	Regeneration Time (minutes)	Method of Regeneration: Alternate Use of Beds, Source Shutdown, or Other (specify)	Time On-line Before Regeneration (minutes)
				Thickness in Direction of Gas Flow (in)	Cross-Sectional Area (in ²)	Weight of Adsorbent per Bed (lb)	Number of Beds				

Section GG.9: Condenser

Control Device ID #	Identify all Emission Units and Control Devices that Feed to Condenser	Identify Type of Condenser: Spray Tower, Jet Ejector, Barometric, Single-Pass Shell-and-Tube, or Multi-Pass Shell-and-Tube (if multi-pass, indicate number of passes)	Identify Type of Coolant: Water, Brine, Liquid Nitrogen, CFC/HFC, or Other (specify)	Coolant Temperature		Coolant Liquid Flowrate (gpm)	Coolant Gas Flowrate (scfm @ 68 °F)	Condensing Surface Area (specify units)	Outlet Gas Temperature (°F)	Outlet Gas Composition
				Inlet (°F)	Outlet (°F)					

Section GG.10: Selective Catalytic Reduction (SCR) / Selective Non-catalytic Reduction (SNCR)

Control Device ID #	Identify all Emission Units and Control Devices that Feed to SCR/SNCR	Type (SCR/SNCR)	Gas Composition	Injection Grid Design (e.g. honeycomb)	Design Temperature Range		Reagent			Maximum Design Ammonia Slip (ppm)	SCR <u>Only</u>			
					Min (°F)	Max (°F)	Type	Injection Rate			Catalyst			
								Min (lb/hr)	Max (lb/hr)		Composition	Volume (ft ³)	Weight (lb)	Replacement Schedule

Section GG.11: Other Control Equipment

Control Device ID #	Identify all Emission Units and Control Devices that Feed to Control Equipment	Type of Control Equipment (provide description and a diagram with dimensions)

Section GG.12: Notes, Comments, and Explanations

DEP FORM 7007HH

Division for Air Quality

300 Sower Boulevard
Frankfort, KY 40601
(502) 564-3999

DEP7007HH

Haul Roads

_____ Section HH.1: Haul Roads
_____ Section HH.2: Yard Area
_____ Section HH.3: Notes, Comments, and Explanations

Additional Documentation

___ Complete DEP7007AI, DEP7007N
and DEP7007V

___ SDS for dust suppressant

Source Name: Republic Services of Kentucky, LLC d/b/a Valley View Landfill

KY EIS (AFS) #: 21- 223-00005

Permit #: V-18-038

Agency Interest (AI) ID: 4059

Date: 6/30/2023

Section HH.1: Haul Roads**HH.1A Unpaved Haul Roads:**

Average Number of Days in a Year with 0.01 inches of Precipitation (P): 125 Days

Mean Vehicle Weight (W): 23 Tons

Surface Material Silt Content (s): 6.4 %

Haul Road Length: 2.8 Miles

Maximum Vehicle Miles Traveled in a Year: _____ Miles

Describe the dust control method for unpaved haul road(s):

(If dust control suppressants will be utilized, attach the approved Safety Data Sheet(s), as applicable.)

The site utilizes a water truck to control emissions on haul roads.

Emission factor:

See Attachment for Form 7007N for emissions factors
used by KDEP for this facility's emissions inventories.

HH.1B Paved Haul Roads:

DEP7007HH

Average Number of Days in a Year with 0.01 inches of Precipitation (P): 125 DaysMean Vehicle Weight (W): 23 TonsRoad Surface Silt Loading (sL): 7.4 (G/M²)Haul Road Length: 0.46 MilesMaximum Vehicle Miles Traveled in a Year: Miles**Describe the dust control method for paved haul road(s):**

(If dust control suppressants will be utilized, attach the approved Safety Data Sheet(s), as applicable.)

The site utilizes a water truck to control emissions on haul roads.

Section HH.2: Yard Area (Aggregate Handling And Storage Piles):Average Number of Days in a Year with 0.01 inches of Precipitation (P): DaysMean Wind Speed (U): MPHMaterial Moisture Content (M): %**Describe the dust control method for yard area:**

(If dust control suppressants will be utilized, attach the approved Safety Data Sheet(s), as applicable.)

Section HH.3: Notes, Comments, and Explanations

LIST OF NON-APPLICABLE REQUIREMENTS

In Section 4 of DEP Form AI (Other Required Information), a space is provided for the applicant to provide the KDEP with a list of non-applicable requirements on a separate attachment, for which the applicant is requesting permit shield coverage. The list below summarizes the requirements which the applicant has identified as non-applicable:

State Regulations Not Applicable to the Valley View Landfill

Per a review of the Kentucky Administrative Regulations for Air Quality, the following state regulations were deemed to be not applicable:

Emission Unit ID No., or activity to which requirement does <u>not</u> apply	Citation	Brief description of requirement	Why the requirement does not apply
All Activities	401 KAR 50:020	Air Quality Control Regions	Not Applicable
All Activities	401 KAR 50:066	Conformity of transportation plans, programs, and projects	Not Applicable
All Activities	401 KAR 51:052	Review of new sources in nonattainment areas	Trimble County is in attainment for all criteria pollutants
All Activities	401 KAR 51:150	NOx requirements for stationary internal combustion engines	No emissions unit of this type are at the facility
All Activities	401 KAR 51:160	NOx requirements for large utility and industrial boilers	No emissions unit of this type are at the facility
All Activities	401 KAR 51:170	NOx requirements for cement kilns	No emissions unit of this type are at the facility
All Activities	401 KAR 51:180	NOx credits for early reduction and emergency	Source not subject to NOx SIP Call
All Activities	401 KAR 51:190	Banking and trading NOx Allowances	Source not subject to NOx SIP Call
All Activities	401 KAR 51:195	NOx Opt-In Provisions	Source not subject to NOx Trading Budget program
All Activities	401 KAR 51:210	CAIR NOx Annual Trading Program	No emissions unit of this type are at the facility
All Activities	401 KAR 51:220	CAIR NOx Ozone Season Trading Program	No emissions unit of this type are at the facility
	401 KAR 51:230	CAIR SO2 Ozone Season	No emissions unit of this

Emission Unit ID No., or activity to which requirement does <u>not</u> apply	Citation	Brief description of requirement	Why the requirement does not apply
All Activities		Trading Program	type are at the facility
All Activities	401 KAR 52:030	Federally enforceable permits for non-major sources	Source is not eligible for this permit since it is required to obtain a Title 5 operating permit.
All Activities	401 KAR 52:040	State-origin permits	Source is not eligible for this permit since it is required to obtain a Title 5 operating permit.
All Activities	401 KAR 52:060	Acid Rain Permits	Source is not subject to acid rain permitting.
All Activities	401 KAR 52:070	Registration of designated sources	Source is not eligible for a registration since it is required to obtain a Title 5 operating permit.
All Activities	401 KAR 52:090	Prohibitory rule for hot mix asphalt plants	No emissions unit of this type are at the facility
All Activities	401 KAR 58:005	Accreditation of Asbestos Professionals	Facility does not conduct asbestos abatement operations.
All Activities	401 KAR 58:010	Local Education Agencies	Regulation only applies to local education agencies
All Activities	401 KAR 58:040	Requirements for Asbestos Abatement Entities	Facility does not conduct asbestos abatement operations.
All Activities	401 KAR 59:001 – 760	New Source Standards	Different source category
All Activities	401 KAR 61:001 – 175	Existing Source Standards	Different source category
All Activities	401 KAR 63:025	Asphalt Paving Operations	No emissions unit of this type are at the facility
All Activities	401 KAR 63:031	Leaks from Gasoline Tank Trucks	No emissions unit of this type are at the facility
All Activities	401 KAR 65	Mobile Source Related Emissions	Stationary Source
All Activities	401 KAR 68	Chemical Accident Prevention	Source does not store chemicals in quantities which trigger the applicability of 40 CFR Part 68

Federal Regulations Not Applicable to the Valley View Landfill

Per a review of the Code of Federal Regulations, the following federal regulations were deemed to be not applicable:

Unit Ref. No., or activity to which requirement does not apply	Citation	Brief description of requirement	Why the requirement does not apply
All Activities	40 CFR 53	Ambient Air Reference & Equivalent Methods	Part 53 imposes no emissions limits
All Activities	40 CFR 54	Prior notice of citizen suits	Part 54 imposes no emissions limits
All Activities	40 CFR 55	Outer Continental Shelf Regulations	Not subject to OCS regulations
All Activities	40 CFR 56	Regional Consistency	Part 56 imposes no emissions limits
All Activities	40 CFR 57	Primary Nonferrous Smelters	Not a nonferrous smelter
All Activities	40 CFR 58	Ambient Air Quality Surveillance	Part 58 imposes no emissions limits
All Activities	40 CFR 59	National Volatile Organic Compound Emission Standards for Consumer and Commercial Products	No applicable source categories or processes
All Activities	40 CFR 60 – New Source Performance Standards, Subparts Cb – Ce & D – VVV, Subparts AAAA – UUUUa	New Source Performance Standards for multiple source categories	Different source category. For NSPS Subpart Kb, the vapor pressure of leachate (which is mostly comprised of water) in the storage tanks are expected to be below the applicable control threshold.
004 – MSW Landfill	40 CFR 60 Subpart XXX	NSPS for MSW Landfills That Commenced Construction, Reconstruction, or Modification after July 17, 2014	The MSW landfill did not commence construction on a modification after July 17, 2014.
All Activities	40 CFR 61 Subparts B – L, Subparts N – Z, and Subparts AA – FF	National Air Emissions Standards for multiple source categories	Different source category
All Activities	40 CFR 62 Subparts A – LLL	State Plans for Designated Facilities	No applicable Part 62 regulations with the exception of Subpart OOO – Federal Plan (MSW Landfills)

Unit Ref. No., or activity to which requirement does not apply	Citation	Brief description of requirement	Why the requirement does not apply
All Activities	40 CFR 63 Subparts B – Z, AA – YY, CCC – XXX, CCCC – YYYY, AAAAA – ZZZZZ, AAAAAA – BBBBBB, DDDDDD – ZZZZZZ, and AAAAAAA – HHHHHHH	MACT standard for multiple source categories.	Different source category. Facility has a gasoline storage tank and it is therefore subject to the 40 CFR 63 Subpart CCCCCC MACT.
LFG Gas Emissions	40 CFR Part 64	Compliance Assurance Monitoring (CAM)	Compliance Assurance Monitoring (CAM) is not applicable since the source is subject to an NSPS promulgated after November 15, 1990 (Landfill NSPS – 40 CFR 60 Subpart Cf)
All Activities	40 CFR Part 65	Consolidated Federal Air Rule	Not Applicable
All Activities	40 CFR Part 66	Assessment and Collection of Noncompliance Penalties by EPA	Not Applicable
All Activities	40 CFR Part 67	EPA Approval of State Noncompliance Penalty Program	Not Applicable
All Activities	40 CFR Parts 68	Chemical Accident Prevention Provisions	Source does not store chemicals in quantities which trigger the applicability of this regulation.
All Activities	40 CFR Part 69	Special Exemptions from Requirements of the Clean Air Act	No Claimed Exemptions
All Activities	40 CFR Part 71	Federal Operating Permit Program	Source is located in a state delegated to administer the Part 70 permitting program
All Activities	40 CFR Part 72 – 78	Acid Rain Regulations	No emissions unit of this type are at the facility
All Activities	40 CFR Parts 79 – 80, 85 – 88	Fuels Regulations, Vehicular Standards	Not Applicable
All Activities	40 CFR Part 81	Area Designations	Part 81 imposes no emissions limits
All Activities	40 CFR Part 91	Control of emissions from Marine Spark Ignition Engines	Source does not operate marine vessels.

Unit Ref. No., or activity to which requirement does not apply	Citation	Brief description of requirement	Why the requirement does not apply
All Activities	40 CFR Part 92	Control of Air Pollution from Locomotives and Locomotive Engines	Source does not operate locomotives or locomotive engines.
All Activities	40 CFR Part 93	Transportation and General Conformity	Not Applicable
All Activities	40 CFR Part 94	Control of emissions from Marine Compression Ignition Engines	Source does not operate marine vessels.
All Activities	40 CFR Part 95	Mandatory Patent Licenses	Not Applicable
All Activities	40 CFR Part 96 & 97	Federal and State NOX Budget Trading Programs and CAIR Programs	No emissions unit of this type are at the facility

APPENDIX A

Updated Emissions Calculations – Significant Activities

Input Review: Valley View Title 5 Renewal

LANDFILL CHARACTERISTICS

Landfill Open Year **1983**
 Landfill Closure Year (with 80-year limit) **2045**

MODEL PARAMETERS

Methane Generation Rate, k **0.040** *year-1*
 Potential Methane Generation Capacity, L0 **100** *m3/Mg*
 NMOC Concentration **595** *ppmv as hexane*
 Methane Content **50** *% by volume*

WASTE ACCEPTANCE RATES

Year	Waste Accepted		Waste-In-Place	
	(Mg/year)	(short tons/year)	(Mg)	(short tons)
1983	133,364	146,700	0	0
1984	133,364	146,700	133,364	146,700
1985	133,364	146,700	266,728	293,401
1986	133,364	146,700	400,092	440,101
1987	133,364	146,700	533,456	586,802
1988	320,000	352,000	666,820	733,502
1989	577,727	635,500	986,820	1,085,502
1990	676,909	744,600	1,564,547	1,721,002
1991	206,364	227,000	2,241,456	2,465,602
1992	230,545	253,600	2,447,820	2,692,602
1993	270,755	297,831	2,678,365	2,946,202
1994	294,924	324,416	2,949,120	3,244,032
1995	280,202	308,222	3,244,044	3,568,448
1996	313,671	345,038	3,524,246	3,876,671
1997	365,431	401,974	3,837,917	4,221,709
1998	321,796	353,976	4,203,348	4,623,683
1999	345,783	380,361	4,525,144	4,977,658
2000	452,932	498,225	4,870,927	5,358,020
2001	555,307	610,838	5,323,859	5,856,245
2002	575,925	633,518	5,879,166	6,467,083
2003	602,100	662,310	6,455,091	7,100,600
2004	671,362	738,498	7,057,191	7,762,910
2005	700,627	770,690	7,728,553	8,501,408
2006	678,684	746,552	8,429,180	9,272,098
2007	660,281	726,309	9,107,864	10,018,650
2008	530,560	583,616	9,768,145	10,744,959
2009	444,456	488,902	10,298,705	11,328,575
2010	435,819	479,401	10,743,161	11,817,477
2011	463,891	510,280	11,178,980	12,296,878
2012	434,855	478,340	11,642,871	12,807,158
2013	379,171	417,088	12,077,725	13,285,498
2014	376,964	414,660	12,456,896	13,702,586
2015	353,663	389,029	12,833,860	14,117,247
2016	357,468	393,215	13,187,523	14,506,276
2017	217,369	239,106	13,544,991	14,899,491
2018	234,587	258,046	13,762,360	15,138,597
2019	237,278	261,006	13,996,947	15,396,642
2020	240,202	264,222	14,234,225	15,657,648
2021	297,904	327,694	14,474,427	15,921,870
2022	283,409	311,750	14,772,331	16,249,564

WASTE ACCEPTANCE RATES (Continued)

Year	Waste Accepted		Waste-In-Place	
	(Mg/year)	(short tons/year)	(Mg)	(short tons)
2023	500,000	550,000	15,055,740	16,561,314
2024	500,000	550,000	15,555,740	17,111,314
2025	500,000	550,000	16,055,740	17,661,314
2026	500,000	550,000	16,555,740	18,211,314
2027	500,000	550,000	17,055,740	18,761,314
2028	500,000	550,000	17,555,740	19,311,314
2029	500,000	550,000	18,055,740	19,861,314
2030	500,000	550,000	18,555,740	20,411,314
2031	500,000	550,000	19,055,740	20,961,314
2032	500,000	550,000	19,555,740	21,511,314
2033	500,000	550,000	20,055,740	22,061,314
2034	500,000	550,000	20,555,740	22,611,314
2035	500,000	550,000	21,055,740	23,161,314
2036	500,000	550,000	21,555,740	23,711,314
2037	500,000	550,000	22,055,740	24,261,314
2038	500,000	550,000	22,555,740	24,811,314
2039	500,000	550,000	23,055,740	25,361,314
2040	500,000	550,000	23,555,740	25,911,314
2041	500,000	550,000	24,055,740	26,461,314
2042	500,000	550,000	24,555,740	27,011,314
2043	500,000	550,000	25,055,740	27,561,314
2044	500,000	550,000	25,555,740	28,111,314
2045	500,000	550,000	26,055,740	28,661,314
2046	0	0	26,555,740	29,211,314

Results

Year	Total landfill gas			Methane		
	(Mg/year)	(m3/year)	(av ft ³ /min)	(Mg/year)	(m3/year)	(av ft ³ /min)
1983	0	0	0	0	0	0
1984	1.309E+03	1.048E+06	7.041E+01	3.496E+02	5.240E+05	3.521E+01
1985	2.566E+03	2.055E+06	1.381E+02	6.854E+02	1.027E+06	6.903E+01
1986	3.774E+03	3.022E+06	2.031E+02	1.008E+03	1.511E+06	1.015E+02
1987	4.935E+03	3.952E+06	2.655E+02	1.318E+03	1.976E+06	1.328E+02
1988	6.050E+03	4.845E+06	3.255E+02	1.616E+03	2.422E+06	1.628E+02
1989	8.953E+03	7.169E+06	4.817E+02	2.391E+03	3.585E+06	2.408E+02
1990	1.427E+04	1.143E+07	7.678E+02	3.812E+03	5.714E+06	3.839E+02
1991	2.035E+04	1.630E+07	1.095E+03	5.437E+03	8.149E+06	5.476E+02
1992	2.158E+04	1.728E+07	1.161E+03	5.765E+03	8.641E+06	5.806E+02
1993	2.300E+04	1.842E+07	1.237E+03	6.143E+03	9.208E+06	6.187E+02
1994	2.475E+04	1.982E+07	1.332E+03	6.612E+03	9.910E+06	6.659E+02
1995	2.668E+04	2.136E+07	1.435E+03	7.125E+03	1.068E+07	7.176E+02
1996	2.838E+04	2.273E+07	1.527E+03	7.581E+03	1.136E+07	7.634E+02
1997	3.034E+04	2.430E+07	1.633E+03	8.105E+03	1.215E+07	8.163E+02
1998	3.274E+04	2.622E+07	1.762E+03	8.745E+03	1.311E+07	8.808E+02
1999	3.462E+04	2.772E+07	1.862E+03	9.246E+03	1.386E+07	9.312E+02
2000	3.665E+04	2.935E+07	1.972E+03	9.790E+03	1.467E+07	9.860E+02
2001	3.966E+04	3.176E+07	2.134E+03	1.059E+04	1.588E+07	1.067E+03
2002	4.355E+04	3.487E+07	2.343E+03	1.163E+04	1.744E+07	1.172E+03
2003	4.750E+04	3.803E+07	2.555E+03	1.269E+04	1.902E+07	1.278E+03
2004	5.154E+04	4.127E+07	2.773E+03	1.377E+04	2.064E+07	1.387E+03
2005	5.611E+04	4.493E+07	3.019E+03	1.499E+04	2.246E+07	1.509E+03
2006	6.078E+04	4.867E+07	3.270E+03	1.624E+04	2.434E+07	1.635E+03
2007	6.506E+04	5.210E+07	3.500E+03	1.738E+04	2.605E+07	1.750E+03
2008	6.899E+04	5.524E+07	3.712E+03	1.843E+04	2.762E+07	1.856E+03
2009	7.149E+04	5.725E+07	3.846E+03	1.910E+04	2.862E+07	1.923E+03
2010	7.305E+04	5.849E+07	3.930E+03	1.951E+04	2.925E+07	1.965E+03
2011	7.446E+04	5.963E+07	4.006E+03	1.989E+04	2.981E+07	2.003E+03
2012	7.609E+04	6.093E+07	4.094E+03	2.033E+04	3.047E+07	2.047E+03
2013	7.738E+04	6.196E+07	4.163E+03	2.067E+04	3.098E+07	2.082E+03
2014	7.806E+04	6.251E+07	4.200E+03	2.085E+04	3.126E+07	2.100E+03
2015	7.870E+04	6.302E+07	4.234E+03	2.102E+04	3.151E+07	2.117E+03
2016	7.909E+04	6.333E+07	4.255E+03	2.113E+04	3.166E+07	2.128E+03
2017	7.949E+04	6.366E+07	4.277E+03	2.123E+04	3.183E+07	2.138E+03
2018	7.851E+04	6.287E+07	4.224E+03	2.097E+04	3.143E+07	2.112E+03
2019	7.773E+04	6.225E+07	4.182E+03	2.076E+04	3.112E+07	2.091E+03
2020	7.701E+04	6.167E+07	4.144E+03	2.057E+04	3.083E+07	2.072E+03
2021	7.635E+04	6.114E+07	4.108E+03	2.039E+04	3.057E+07	2.054E+03
2022	7.628E+04	6.108E+07	4.104E+03	2.038E+04	3.054E+07	2.052E+03
2023	7.607E+04	6.091E+07	4.093E+03	2.032E+04	3.046E+07	2.046E+03
2024	7.799E+04	6.245E+07	4.196E+03	2.083E+04	3.123E+07	2.098E+03
2025	7.984E+04	6.393E+07	4.296E+03	2.133E+04	3.197E+07	2.148E+03
2026	8.162E+04	6.536E+07	4.391E+03	2.180E+04	3.268E+07	2.196E+03
2027	8.332E+04	6.672E+07	4.483E+03	2.226E+04	3.336E+07	2.242E+03
2028	8.496E+04	6.804E+07	4.571E+03	2.269E+04	3.402E+07	2.286E+03
2029	8.654E+04	6.930E+07	4.656E+03	2.312E+04	3.465E+07	2.328E+03
2030	8.805E+04	7.051E+07	4.737E+03	2.352E+04	3.525E+07	2.369E+03
2031	8.951E+04	7.167E+07	4.816E+03	2.391E+04	3.584E+07	2.408E+03
2032	9.090E+04	7.279E+07	4.891E+03	2.428E+04	3.640E+07	2.445E+03

Results (Continued)

Year	Total landfill gas			Methane		
	(Mg/year)	(m3/year)	(av ft ³ /min)	(Mg/year)	(m3/year)	(av ft ³ /min)
2033	9.225E+04	7.387E+07	4.963E+03	2.464E+04	3.693E+07	2.482E+03
2034	9.353E+04	7.490E+07	5.032E+03	2.498E+04	3.745E+07	2.516E+03
2035	9.477E+04	7.589E+07	5.099E+03	2.532E+04	3.795E+07	2.550E+03
2036	9.596E+04	7.684E+07	5.163E+03	2.563E+04	3.842E+07	2.582E+03
2037	9.711E+04	7.776E+07	5.225E+03	2.594E+04	3.888E+07	2.612E+03
2038	9.821E+04	7.864E+07	5.284E+03	2.623E+04	3.932E+07	2.642E+03
2039	9.926E+04	7.948E+07	5.341E+03	2.651E+04	3.974E+07	2.670E+03
2040	1.003E+05	8.030E+07	5.395E+03	2.679E+04	4.015E+07	2.698E+03
2041	1.013E+05	8.108E+07	5.448E+03	2.705E+04	4.054E+07	2.724E+03
2042	1.022E+05	8.183E+07	5.498E+03	2.730E+04	4.091E+07	2.749E+03
2043	1.031E+05	8.255E+07	5.546E+03	2.754E+04	4.127E+07	2.773E+03
2044	1.040E+05	8.324E+07	5.593E+03	2.777E+04	4.162E+07	2.796E+03
2045	1.048E+05	8.390E+07	5.638E+03	2.799E+04	4.195E+07	2.819E+03
2046	1.056E+05	8.454E+07	5.680E+03	2.820E+04	4.227E+07	2.840E+03
2047	1.014E+05	8.123E+07	5.458E+03	2.710E+04	4.061E+07	2.729E+03
2048	9.746E+04	7.804E+07	5.244E+03	2.603E+04	3.902E+07	2.622E+03
2049	9.364E+04	7.498E+07	5.038E+03	2.501E+04	3.749E+07	2.519E+03
2050	8.997E+04	7.204E+07	4.841E+03	2.403E+04	3.602E+07	2.420E+03

Results (Continued)

Year	Carbon dioxide			NMOC		
	(Mg/year)	(m3/year)	(av ft^3/min)	(Mg/year)	(m3/year)	(av ft^3/min)
1983	0	0	0	0	0	0
1984	9.591E+02	5.240E+05	3.521E+01	2.235E+00	6.235E+02	4.189E-02
1985	1.881E+03	1.027E+06	6.903E+01	4.382E+00	1.223E+03	8.215E-02
1986	2.766E+03	1.511E+06	1.015E+02	6.446E+00	1.798E+03	1.208E-01
1987	3.617E+03	1.976E+06	1.328E+02	8.428E+00	2.351E+03	1.580E-01
1988	4.434E+03	2.422E+06	1.628E+02	1.033E+01	2.883E+03	1.937E-01
1989	6.562E+03	3.585E+06	2.408E+02	1.529E+01	4.266E+03	2.866E-01
1990	1.046E+04	5.714E+06	3.839E+02	2.437E+01	6.800E+03	4.569E-01
1991	1.492E+04	8.149E+06	5.476E+02	3.476E+01	9.698E+03	6.516E-01
1992	1.582E+04	8.641E+06	5.806E+02	3.686E+01	1.028E+04	6.909E-01
1993	1.685E+04	9.208E+06	6.187E+02	3.928E+01	1.096E+04	7.362E-01
1994	1.814E+04	9.910E+06	6.659E+02	4.227E+01	1.179E+04	7.924E-01
1995	1.955E+04	1.068E+07	7.176E+02	4.556E+01	1.271E+04	8.540E-01
1996	2.080E+04	1.136E+07	7.634E+02	4.847E+01	1.352E+04	9.085E-01
1997	2.224E+04	1.215E+07	8.163E+02	5.182E+01	1.446E+04	9.714E-01
1998	2.400E+04	1.311E+07	8.808E+02	5.592E+01	1.560E+04	1.048E+00
1999	2.537E+04	1.386E+07	9.312E+02	5.912E+01	1.649E+04	1.108E+00
2000	2.686E+04	1.467E+07	9.860E+02	6.259E+01	1.746E+04	1.173E+00
2001	2.907E+04	1.588E+07	1.067E+03	6.773E+01	1.890E+04	1.270E+00
2002	3.192E+04	1.744E+07	1.172E+03	7.438E+01	2.075E+04	1.394E+00
2003	3.481E+04	1.902E+07	1.278E+03	8.112E+01	2.263E+04	1.520E+00
2004	3.777E+04	2.064E+07	1.387E+03	8.803E+01	2.456E+04	1.650E+00
2005	4.112E+04	2.246E+07	1.509E+03	9.582E+01	2.673E+04	1.796E+00
2006	4.455E+04	2.434E+07	1.635E+03	1.038E+02	2.896E+04	1.946E+00
2007	4.768E+04	2.605E+07	1.750E+03	1.111E+02	3.100E+04	2.083E+00
2008	5.056E+04	2.762E+07	1.856E+03	1.178E+02	3.287E+04	2.209E+00
2009	5.239E+04	2.862E+07	1.923E+03	1.221E+02	3.406E+04	2.289E+00
2010	5.354E+04	2.925E+07	1.965E+03	1.248E+02	3.480E+04	2.338E+00
2011	5.457E+04	2.981E+07	2.003E+03	1.272E+02	3.548E+04	2.384E+00
2012	5.577E+04	3.047E+07	2.047E+03	1.300E+02	3.625E+04	2.436E+00
2013	5.671E+04	3.098E+07	2.082E+03	1.321E+02	3.687E+04	2.477E+00
2014	5.721E+04	3.126E+07	2.100E+03	1.333E+02	3.719E+04	2.499E+00
2015	5.768E+04	3.151E+07	2.117E+03	1.344E+02	3.750E+04	2.519E+00
2016	5.796E+04	3.166E+07	2.128E+03	1.351E+02	3.768E+04	2.532E+00
2017	5.826E+04	3.183E+07	2.138E+03	1.358E+02	3.787E+04	2.545E+00
2018	5.754E+04	3.143E+07	2.112E+03	1.341E+02	3.741E+04	2.513E+00
2019	5.697E+04	3.112E+07	2.091E+03	1.328E+02	3.704E+04	2.488E+00
2020	5.644E+04	3.083E+07	2.072E+03	1.315E+02	3.669E+04	2.465E+00
2021	5.596E+04	3.057E+07	2.054E+03	1.304E+02	3.638E+04	2.444E+00
2022	5.591E+04	3.054E+07	2.052E+03	1.303E+02	3.634E+04	2.442E+00
2023	5.575E+04	3.046E+07	2.046E+03	1.299E+02	3.624E+04	2.435E+00
2024	5.716E+04	3.123E+07	2.098E+03	1.332E+02	3.716E+04	2.497E+00
2025	5.852E+04	3.197E+07	2.148E+03	1.364E+02	3.804E+04	2.556E+00
2026	5.982E+04	3.268E+07	2.196E+03	1.394E+02	3.889E+04	2.613E+00
2027	6.107E+04	3.336E+07	2.242E+03	1.423E+02	3.970E+04	2.667E+00
2028	6.227E+04	3.402E+07	2.286E+03	1.451E+02	4.048E+04	2.720E+00
2029	6.342E+04	3.465E+07	2.328E+03	1.478E+02	4.123E+04	2.770E+00
2030	6.453E+04	3.525E+07	2.369E+03	1.504E+02	4.195E+04	2.819E+00
2031	6.560E+04	3.584E+07	2.408E+03	1.529E+02	4.265E+04	2.865E+00
2032	6.662E+04	3.640E+07	2.445E+03	1.552E+02	4.331E+04	2.910E+00

Results (Continued)

Year	Carbon dioxide			NMOc		
	(Mg/year)	(m3/year)	(av ft^3/min)	(Mg/year)	(m3/year)	(av ft^3/min)
2033	6.761E+04	3.693E+07	2.482E+03	1.575E+02	4.395E+04	2.953E+00
2034	6.855E+04	3.745E+07	2.516E+03	1.597E+02	4.456E+04	2.994E+00
2035	6.946E+04	3.795E+07	2.550E+03	1.619E+02	4.515E+04	3.034E+00
2036	7.033E+04	3.842E+07	2.582E+03	1.639E+02	4.572E+04	3.072E+00
2037	7.117E+04	3.888E+07	2.612E+03	1.658E+02	4.627E+04	3.109E+00
2038	7.197E+04	3.932E+07	2.642E+03	1.677E+02	4.679E+04	3.144E+00
2039	7.275E+04	3.974E+07	2.670E+03	1.695E+02	4.729E+04	3.178E+00
2040	7.349E+04	4.015E+07	2.698E+03	1.713E+02	4.778E+04	3.210E+00
2041	7.421E+04	4.054E+07	2.724E+03	1.729E+02	4.824E+04	3.241E+00
2042	7.489E+04	4.091E+07	2.749E+03	1.745E+02	4.869E+04	3.271E+00
2043	7.555E+04	4.127E+07	2.773E+03	1.761E+02	4.912E+04	3.300E+00
2044	7.619E+04	4.162E+07	2.796E+03	1.775E+02	4.953E+04	3.328E+00
2045	7.679E+04	4.195E+07	2.819E+03	1.789E+02	4.992E+04	3.354E+00
2046	7.738E+04	4.227E+07	2.840E+03	1.803E+02	5.030E+04	3.380E+00
2047	7.434E+04	4.061E+07	2.729E+03	1.732E+02	4.833E+04	3.247E+00
2048	7.143E+04	3.902E+07	2.622E+03	1.664E+02	4.644E+04	3.120E+00
2049	6.863E+04	3.749E+07	2.519E+03	1.599E+02	4.462E+04	2.998E+00
2050	6.594E+04	3.602E+07	2.420E+03	1.537E+02	4.287E+04	2.880E+00

Calculate Max Fugitive NMOC/VOC Emissions at closure (assuming a 75% collection efficiency):

180.31	Mg/year *	0.25	=	45.08	Mg/year
				49.59	tons/year
				11.32	lbs/hour

Calculate "fugitive" LFG using 80% collection efficiency, to develop the emissions factor:

5,680 cfm produced *	0.25 =	1,420 ft3/min fugitive LFG
		746,416,842 ft3/year fugitive LFG
		746.42 mmscf/yr fugitive LFG

Calculate emissions factors for NMOC, CO₂ & Methane, in terms of lbs/mmscf of fugitive LFG:

NMOC

49.59 tons/year *	2000 lbs/ton /	746.42 million ft3/yr fugitive LFG
	=	132.8633 lbs NMOC/million ft3 LFG

CO2

77378.74	Mg/year *	0.20	=	15475.75	Mg/year
				17023	tons/year
				45,613	lbs CO2/million ft3 LFG

CH₄

28201.66	Mg/year *	0.20	=	5640.33	Mg/year
				6204	tons/year

Use 10% Cover Oxidation Factor from 40 CFR 98:

5584 tons/year
14,962 lbs CH₄/million ft³ LFG

**Valley View Landfill
Compactor & Dozer Emissions Calculations
Title 5 Renewal Application**

Assumptions:

1. Emissions are based on updated tons of waste processed/year: 550,000 tons waste (updated throughput request)
2. Factor used is 0.183 lbs PM10 / ton of material processed.
3. A 90% reduction is applied due to "wet material" per original Title V application calculations.

Calculate Emissions:

$$550,000 \text{ tons waste} * 0.183 \frac{\text{lbs PM10}}{\text{ton material}} (1 - 0.9) * \frac{1 \text{ ton}}{2000 \text{ lbs}} 5.03 \frac{\text{tons PM10}}{\text{year}}$$

Valley View Landfill

Title V Renewal Application UPDATED CALCS FOR 2022 OFF-PERMIT CHANGE Fugitive Roadway Emissions from Waste Hauling

Vehicle Type	Vehicle Wt. Unloaded (ton)	Vehicle Wt. Loaded (ton)	Mean Vehicle Weight (tons)	% of all Waste Trucks	* Trucks/ Yr	Net Refuse Weight (tons)	W Mean Vehicle Weight (tons)
Average Refuse Vehicle	15	31	23	100%	34,400	550,400	23.00
				100%	34,400	550,400	23.00
Number of waste trucks >>						34,400	

Spreadsheet Inputs:

s = surf. mat. silt content (unpaved) = 6.4 % (from Table 13.2.2-1 for MSW Landfills)
 sL = paved road surface silt load (g/m2) = 7.4 g/m2 (Table 13.2.1-3 for MSW Landfills)
 P = # of day/yr with precip. = 124 days
 UPR = Total length of unpaved roads = 15000 ft (roundtrip) 2.84 miles
 PR = Total length of paved roads = 5040 ft (roundtrip) 0.95 miles
 VMT = Vehicle mile traveled
 W = fleet mean vehicle weight (tons)
 N = Number of days in the averaging period 365
 Control Efficiency 70% 40%
 TSP, PM10 PM2.5

Formulas for Emissions Factors:

Unpaved Road: $E = k * [s/12]^a * [W/3]^b * [(365 - p)/365]$ (AP-42 Chapter 13.2.2, 11/06)

Constant	PM2.5	PM10	PM30(TSP)
k (lb/VMT)	0.15	1.5	4.9
a	0.9	0.9	0.7
b	0.45	0.45	0.45

Paved Road E = $[(k * (sL)^{0.91} * (W)^{1.02}) * [1 - P/(4 * N)]]$ (AP-42 Chapter 13.2.1, 1/11)

Constant	PM2.5	PM10	PM30(TSP)
k (lb/VMT)	0.00054	0.0022	0.011

Emission Calculations:

W = Fleet Mean Vehicle Weight =	23.00 tons
---------------------------------	------------

	Vehicles	Miles	E (2.5)	E (10)	E (TSP)
Unpaved Roads	34,400	2.84	0.1407	1.4067	5.2107
Paved Roads	34,400	0.95	0.0748	0.3047	1.5234
Total (tons/yr) - Uncontrolled			8.10	73.74	279.62
Control Efficiency			40%	70%	70%
Total (tons/yr) - Controlled			4.86	22.12	83.89

Calculate VMT:
 97,727.27 Unpaved Roads
 32,836.36 Paved Roads

NOTE:

Factors for PM emissions from vehicle exhaust, break wear and tire wear are not subtracted out, since EPA MOBILE 6.2 is not being utilized.

Valley View: Landfill HAPs Emissions - Title 5 Renewal Application

Fugitive Gas Production Rate 2046 = 1,420 cfm = 21,137,128 m³/year
(assumes 75% collection efficiency)

UNCONTROLLED LANDFILL GAS CONCENTRATIONS (a) - (SCC 50200602)							
CAS number	COMPOUND	Concentration ppmv*	MOLECULAR WEIGHT	GRAVIMETRIC CONCENTRATION (mg/M ³)	POTENTIAL TO EMIT**		
					HAPS (Mg/yr)	HAPS (lbs/hr)	HAPS (tons/yr)
71556	1,1,1-Trichloroethane (methyl chloroform)	0.48	133.42	2.62	0.0554	0.0139	0.0611
79345	1,1,2,2-Tetrachloroethane	1.11	167.86	7.62	0.1611	0.0406	0.1777
75343	1,1-Dichloroethane (ethylidene dichloride)	2.35	98.96	9.51	0.2010	0.0506	0.2218
75354	1,1-Dichloroethene (vinylidene chloride)	0.20	96.95	0.79	0.0168	0.0042	0.0185
107062	1,2-Dichloroethane (ethylene dichloride)	0.41	98.96	1.66	0.0351	0.0088	0.0387
78875	1,2-Dichloropropane (propylene dichloride)	0.18	112.99	0.83	0.0176	0.0044	0.0194
107131	Acrylonitrile	6.33	53.06	13.74	0.2904	0.0731	0.3204
75150	Carbon disulfide	0.58	76.14	1.81	0.0382	0.0096	0.0421
56235	Carbon tetrachloride	0.00	153.84	0.00	0.0000	0.0000	0.0000
463581	Carbonyl sulfide	0.49	60.07	1.20	0.0254	0.0064	0.0281
108907	Chlorobenzene	0.25	112.56	1.15	0.0243	0.0061	0.0268
75003	Chloroethane (ethyl chloride)	1.25	64.52	3.30	0.0697	0.0176	0.0769
67663	Chloroform	0.03	119.39	0.15	0.0031	0.0008	0.0034
75092	Dichloromethane (methylene chloride)	14.30	84.94	49.68	1.0501	0.2645	1.1585
100414	Ethylbenzene	4.61	106.16	20.02	0.4231	0.1066	0.4668
110543	Hexane	6.57	86.17	23.15	0.4894	0.1233	0.5400
67630	Isopropanol**	50.10	60.11	123.17	2.6035	0.6558	2.8724
78933	Methyl Ethyl Ketone**	9.09	72.10	26.81	0.5666	0.1427	0.6251
108101	Methyl isobutyl ketone	1.87	100.07	7.65	0.1618	0.0408	0.1785
127184	Perchloroethylene (tetrachloroethene)	3.73	165.85	25.30	0.5348	0.1347	0.5900
79016	Trichloroethylene	2.82	131.39	15.15	0.3203	0.0807	0.3534
75014	Vinyl chloride	7.34	62.50	18.76	0.3966	0.0999	0.4376
71432	Benzene	1.91	78.11	6.10	0.1290	0.0325	0.1423
74873	Methyl chloride(Chloromethane)	1.21	50.49	2.50	0.0528	0.0133	0.0583
108883	Toluene	39.30	92.13	148.09	3.1301	0.7885	3.4535
1330207	Xylene (isomers and mixtures)	12.10	106.16	52.54	1.1105	0.2797	1.2252
	Mercury Compounds *	0.00	200.61	0.00	0.0000	0.0000	0.0000
Total HAPs:							9.64

*Assumes a gas collection system efficiency of 75%.

*based on 11/98 AP-42 Factors for Landfill Gas

**Not a HAP - reported since KDEP requested it on the inventory starting in 2021.

Calculate Emissions Factors for several HAPs based on million ft³ of fugitive gas production:

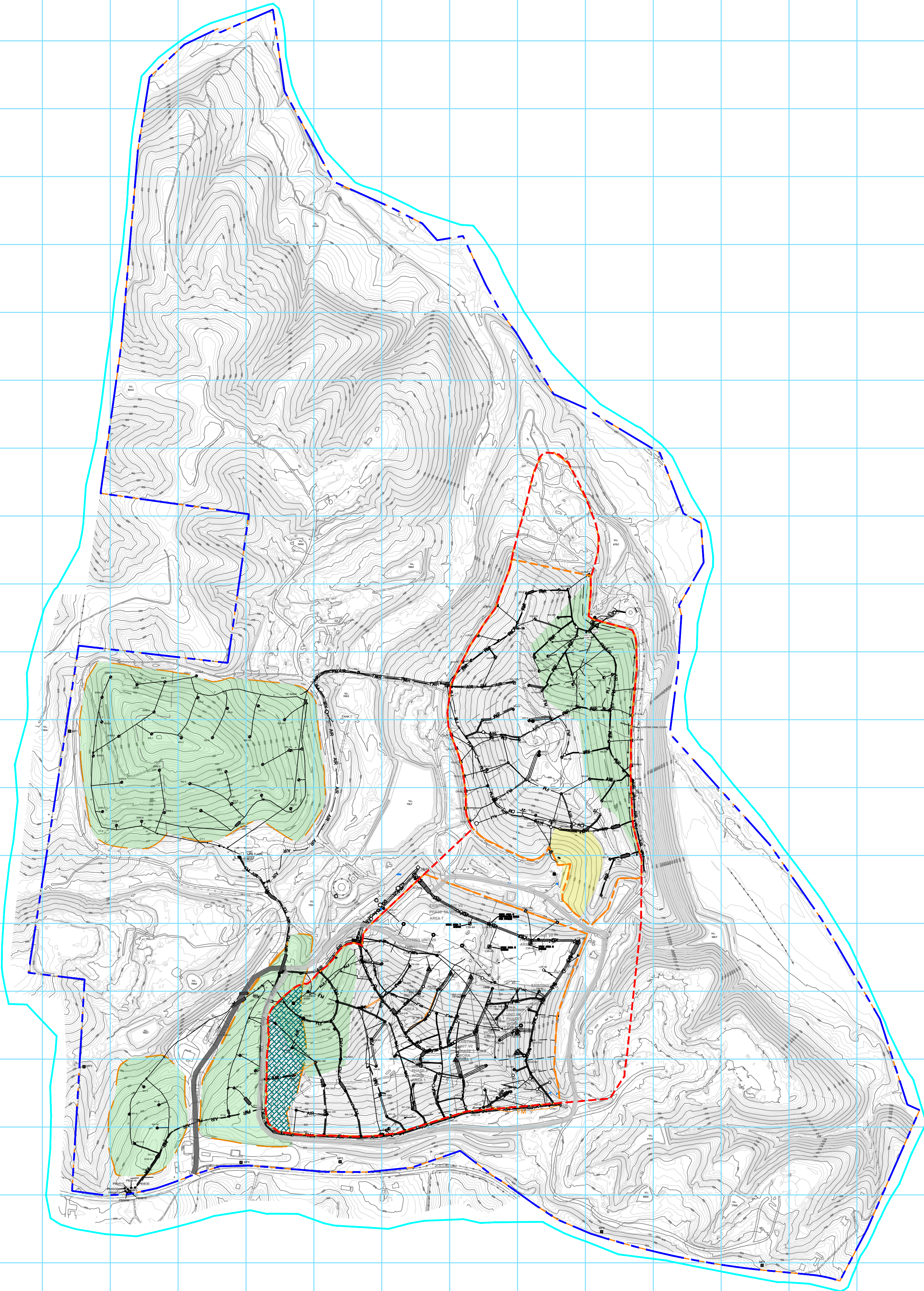
746.35 mmscf LFG pre-control

Chlorobenzene:	0.0719 lbs/mmscf fugitive LFG
Dichloromethane:	3.1045 lbs/mmscf fugitive LFG
Ethyl Benzene:	1.2509 lbs/mmscf fugitive LFG
Isopropanol	7.6972 lbs/mmscf fugitive LFG
Methyl Ethyl Ketone:	1.6751 lbs/mmscf fugitive LFG
Toluene:	9.2542 lbs/mmscf fugitive LFG
Xylene:	3.2832 lbs/mmscf fugitive LFG

APPENDIX B

Site Plan Map

Z:\SHARED\BEL\ENV\VALLEY VIEW LF\2023\2023_302-TITLE V DRWG\PLAN01 PLAN VIEW DWG 3/3/2023



LEGEND

LIMITS OF AREA BY AERIAL CONTRACTOR

FACILITY PROPERTY BOUNDARY

PERMITTED LIMITS OF WASTE

EXISTING LIMITS OF WASTE

EXISTING PHASE LIMITS

800

EXISTING 10' CONTOUR

12"

EXISTING 2' CONTOUR

AIR

EXISTING LANDFILL GAS HEADER

FM

EXISTING AIR LINE

FM

EXISTING FORCEMAIN LINE

L

EXISTING LEACHATE COLLECTION LINE

L

EXISTING LEACHATE COLLECTION LINE

3"x6"

EXISTING 3"x6" LEACHATE FORCEMAIN LINE

EL

EXISTING ELECTRICAL LINE

EL

EXISTING HORIZONTAL COLLECTOR

LGD

EXISTING LEACHATE GRAVITY DRAIN LINE

EXISTING LFG EXTRACTION WELL

EXISTING REMOTE WELLHEAD

EXISTING CONDENSATE SUMP

EXISTING ROCK SUMP

EXISTING BLIND FLANGE

EXISTING CONTROL VALVE

EXISTING ACCESS RISER

EXISTING FORCEMAIN CLEANOUT

EXISTING HORIZONTAL COLLECTOR ROCK SUMP

EXISTING AIR & FORCEMAIN VALVES

EXISTING VERTICAL SUMP

EXISTING FLOW METER

EXISTING METHANE MONITORING LOCATION

EXISTING FINAL COVER AREA

EXISTING TEMPORARY CAP AREA

EXISTING PAVED ROADWAYS

EXISTING UNPAVED ROADWAYS

- NOTES:
- AERIAL PHOTOGRAPHY PROVIDED BY FIRMATEK
 - AS-BUILT SURVEY DATA PROVIDED BY KENVIRONS, INC. DATED SEPTEMBER 16, 2022.

VALLEY VIEW LF

TITLE V

BEL

ENVIRONMENTAL
ENGINEERING

PROJECT NUMBER: 2023.302

ENG: BKG

CAD: DD

CHK: DD

REV: DATE

AERIAL SURVEY DATE: 12/07/21

SUBMITTAL DATE: 03/01/23

PLOT DATE: 3/3/23

DESCRIPTION

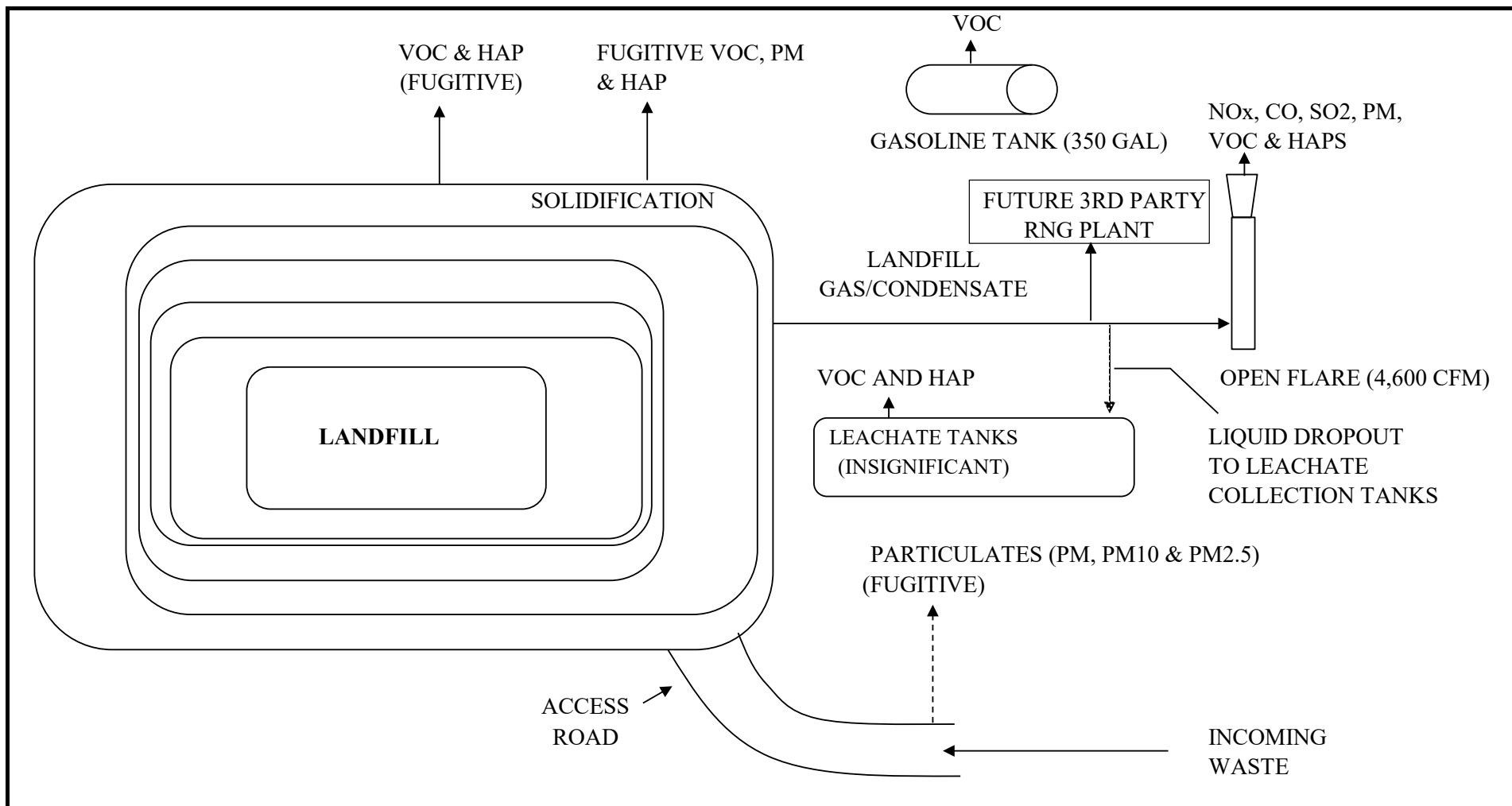
DRAWING:

01

OF 01

APPENDIX C

Process Flow Diagram



DES BY: LLN DATE: JUNE 2023		VALLEY VIEW LANDFILL TITLE V RENEWAL APPLICATION SULPHUR, KENTUCKY
PREPARED BY: Environmental Information Logistics, LLC 130 E. Main Street Caledonia, MI 49316		PROCESS FLOW DIAGRAM LANDFILL AND MISCELLANEOUS SOURCES