



**ENVIRONMENTAL  
INFORMATION  
LOGISTICS, LLC**

**4463 Hilltop Drive  
New Franklin, OH 44203  
Phone: 630-209-3931  
www.eillc.com**

May 12, 2023

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

RE: Dozit Landfill – Union County, KY  
Source I.D. No. 21-225-00061  
Title V Operating Permit V-18-029 – Renewal Application

Dear Ms. Tempus-Doom:

The Dozit Landfill located in Morganfield, Kentucky was issued a Title V Operating Permit Renewal on November 24, 2018. 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 Dozit Landfill, that date corresponds to May 24, 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, Dozit Landfill. If you have any questions or comments, please call me at (630) 209-3931 or Branham Lafferty of Dozit Landfill at (618) 936-4379.

Sincerely,  
Environmental Information Logistics, LLC

Emily M. Nelson  
Senior Project Manager

cc: Branham Lafferty, Dozit Landfill

**Dozit Landfill**  
**SOURCE I.D. #21-225-00061**

**Application for Renewal of a Title V Permit**

**Morganfield**  
**Union County, Kentucky**

***May 2023***

**Prepared by:**

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

## **TABLE OF CONTENTS**

	<b><u>SECTION</u></b>
Introduction .....	1
Application Forms .....	2
DEP Form 7007AI – Administrative Information	
DEP Form 7007B – Manufacturing or Process Operations	
DEP Form 7007N – Source Emissions Profile	
DEP Form 7007V – Applicable Requirements & Compliance Activities	
DEP Form 7007CC – Compliance Certification	
DEP Form 7007DD – Insignificant Activities	
List of Non-Applicable Requirements.....	3

## **APPENDICES**

Appendix A	–	Updated Emissions Calculations (Significant Activities)
Appendix B	–	Emissions Calculations (Insignificant Activities)
Appendix C	–	Site Plan Map
Appendix D	–	Process Flow Diagram

## INTRODUCTION

Republic Services of KY, LLC (Republic) owns and operates the Dozit Landfill (Dozit), an inactive municipal solid waste landfill located in Morganfield, Union County, Kentucky. Union County has been designated as attainment for all criteria pollutants.

On November 24, 2018, the Kentucky Department for Environmental Protection issued a Title 5 Operating Permit (Air Quality General Permit) for the facility. The permit expires on November 24, 2023 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 May 24, 2023). Republic 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:

<b><u>Emissions Unit No.</u></b>	<b><u>Emissions Unit Description</u></b>
001	Municipal Solid Waste (MSW) Landfill
003	Paved and Unpaved Haul Roads
004	Site Construction/Operation

There are no new significant emissions units to add for this renewal application. The facility still does not have a gas collection or control system installed since NMOC emissions remain less than 50 Mg/year for the Landfill NESHAP and are below 34 Mg/year for the Federal Plan. The most recent Tier 2 test was conducted at the site on September 21, 2021 – September 23, 2021.

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

- Leachate Storage Tank (100,000 gallons)
- One Office Heater (Propane; 0.125 mmBTU/hr)
- Two Diesel Storage Tanks (550 gallons & 10,000 gallons)
- One Propane Storage Tank (500 gallons)
- Three Used Oil Tanks

All of the above-listed insignificant emissions units are still present at the facility; none have been removed. In addition to these, the following insignificant emissions units should be added:

- Twelve (12) passive landfill gas vents installed in the certified closed areas.

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

- Emissions Calculation Updates for significant activities (Appendix A) and insignificant activities (Appendix B), and an updated list of insignificant activities (DEP Form 7007 DD);
- 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.

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 Dozit, 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. An Initial Design Capacity Report and an NMOC emissions report were submitted on September 17, 2021, as part of the required reporting for the Federal Plan. The facility proposed in these reports to conduct Tier 2 testing under the original NSPS five-year schedule.

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)). Since the Federal Plan is now in effect, the renewal permit issued for Dozit should incorporate the Federal Plan and remove all prior references to 40 CFR 60 Subpart WWW.

**40 CFR 63, Subpart AAAA (Revised – National Emissions Standards for Hazardous Air Pollutants – Municipal Solid Waste Landfills):** The Landfill NESHAP (40 CFR 63 Subpart AAAA) revisions were promulgated on March 26, 2020, and became effective September 27, 2021. However, since applicability is for landfills with NMOC emissions above 50 Mg/year, this regulation does not yet apply to Dozit since NMOC emissions via the five-year Tier 2 testing are less than 50 Mg/year. The continued non-applicability of this regulation should be stated in the Title V renewal permit for Dozit.

## **APPLICATION FORMS**

The following application forms are included in this section:

- DEP Form 7007AI – Administrative Information
- DEP Form 7007B – Manufacturing or Process Operations
- DEP Form 7007N – Source Emissions Profile
- DEP Form 7007V – Applicable Requirements & Compliance Activities
- DEP Form 7007CC – Compliance Certification
- DEP Form 7007DD – Insignificant Activities

**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 Dozit Landfill

**KY EIS (AFS) #:** 21- 225-00061

**Permit #:** V-18-029

**Agency Interest (AI) ID:** 15674

**Date:** 5-May-23

**Section AI.1: Source Information**

<b>Physical Location</b>	<b>Street:</b>	<u>4075 State Route 360</u>		
<b>Address:</b>	<b>City:</b>	<u>Morganfield</u>	<b>County:</b>	<u>Union</u>
			<b>Zip Code:</b>	<u>42347</u>
<b>Mailing Address:</b>	<b>Street or P.O. Box:</b>	<u>2121 Wimberg Road</u>		
	<b>City:</b>	<u>Evansville</u>	<b>State:</b>	<u>IN</u>
			<b>Zip Code:</b>	<u>47720</u>

**Standard Coordinates for Source Physical Location**

**Longitude:** 87.5842 (decimal degrees) **Latitude:** 37.4422 (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:**

The facility is an inactive landfill permitted for the disposal of municipal solid waste.

**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:**

0 (site inactive)

☐ Urban Area☐ Industrial Area☐ Commercial Area☒ No**Approximate distance to nearest residence or commercial property:**

1000 feet

**Property Area:**

234 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 Dozit Landfill

**Title:** (if individual)

**Mailing Address:** **Street or P.O. Box:** 2121 Wimberg Road  
**City:** Evansville **State:** IN **Zip Code:** 47720

**Email:** (if individual)

**Phone:** 618-936-4379

**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 M. 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**\_\_\_\_\_  
Republic Services of Kentucky, LLC\_\_\_\_\_  
Officers of the LLC have non ownership interest in this LLC\_\_\_\_\_  
owned by Republic Services, Inc.

## Section AI.4: Type of Application

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

**Is the source requesting a limitation of potential emissions?**

☐ Yes

☒ No

<b>Pollutant:</b>	<b>Requested Limit:</b>	<b>Pollutant:</b>	<b>Requested Limit:</b>
<input type="checkbox"/> Particulate Matter	_____	<input type="checkbox"/> Single HAP	_____
<input type="checkbox"/> Volatile Organic Compounds (VOC)	_____	<input type="checkbox"/> Combined HAPs	_____
<input type="checkbox"/> Carbon Monoxide	_____	<input type="checkbox"/> Air Toxics (40 CFR 68, Subpart F)	_____
<input type="checkbox"/> Nitrogen Oxides	_____	<input type="checkbox"/> Carbon Dioxide	_____
<input type="checkbox"/> Sulfur Dioxide	_____	<input type="checkbox"/> Greenhouse Gases (GHG)	_____
<input type="checkbox"/> Lead	_____	<input type="checkbox"/> 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:

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

5/12/23  
\_\_\_\_\_  
Date

\_\_\_\_\_  
Branham Lafferty  
Type or Printed Name of Signatory

\_\_\_\_\_  
Environmental Manager  
Title of Signatory

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

<b>Section AI.7: Notes, Comments, and Explanations</b>

**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 Dozit Landfill

KY EIS (AFS) #:

21- 225-00061

Permit #:

V-18-029

Agency Interest (AI) ID:

15674

Date:

5-May-23**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 <u>Continuous</u> or <u>Batch</u> ?	Number of Batches per 24 Hours (if applicable)	Hours per Batch (if applicable)
001	MSW Landfill	Sanitary Landfilling of Municipal Solid Waste (MSW)	N/A	N/A	N/A	N/A	1975	Continuous		

[illegible]

<b>Section B.3: Notes, Comments, and Explanations</b>

**DEP FORM 7007N**

<div>Division for Air Quality  300 Sower Boulevard Frankfort, KY 40601 (502) 564-3999</div>	<div>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</div>	<div>Additional Documentation  ___ Complete DEP7007AI</div>
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Source Name:	Republic Services of Kentucky, LLC d/b/a Dozit Landfill
KY EIS (AFS) #:	21- 225-00061
Permit #:	V-18-029
Agency Interest (AI) ID:	15674
Date:	5/1/2023

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													

## 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)
001	MSW Landfill	5	Landfilling of MSW Waste - Fugitive Emissions	N/A - no controls	N/A	N/A	5,220,000 Mg	1,2 Dichloroethane	0.1034 lbs/mmscf	KDEP EIS	N/A	N/A	0.0040		0.02	
								CO2	57.017 lbs/mmscf				2189.45		9589.80	
								Dichloromethane	3.096 lbs/mmscf				0.1189		0.52	
								Ethyl Benzene	1.2474 lbs/mmscf				0.0479	Same as uncontrolled	0.21	Same as uncontrolled
								Methane	18,702 lbs/mmscf				718.16		3145.53	
								Toluene	9.229 lbs/mmscf				0.3544		1.55	
								Xylenes	3.2742 lbs/mmscf				0.1257		0.55	
								H2S	0.3121 lbs/mmscf				0.0120		0.05	
003	Unpaved and Paved Haul Roads (MSW LF)	1	Unpaved and Paved Haul Roads (MSW LF)	Dust Suppression (Water Truck)	WT- Water Truck	N/A - Fugitive	18,528 VMT	VOC	47.16 lbs/mmscf**	KDEP EIS	N/A	75.00%	1.8109		7.93	
								PM2.5	0.798 lb/VMT				N/A	N/A	7.393	1.848
								PM10	5.32 lb/VMT				N/A	N/A	49.284	49.284
004	Solid Waste Cover Operations	1	Waste Processed	Dust Suppression (Water Truck)	WT- Water Truck	N/A - Fugitive	150,000 tons/year	PM	5.32 lb/VMT	KDEP EIS	N/A	90.00%			49.284	
								PM2.5	.02745 lbs/ton material processed				N/A	N/A	2.05875	0.205875
								PM10	.183 lbs/ton material processed				N/A	N/A	13.725	1.3725
								PM	.183 lbs/ton material processed						13.725	1.3725

MSW LF Emissions are based on highest projected gas flow rate from the inactive site over the next five years (calendar year 2023 - 336.1 mmscf/year & 0.0384 mmscf/hour generated).

Paved/unpaved road emissions are based on VMT listed in current Title 5 permit (18,528 VMT/year). No increase is requested since site is mothballed.

Site construction emissions are based on tonnage listed in current Title 5 permit (150,000 tons/waste managed per year). No increase is requested since site is mothballed.

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 <i>(ft)</i>	Height <i>(ft)</i>	Base Elevation <i>(ft)</i>	Northing <i>(m)</i>	Easting <i>(m)</i>	Flowrate <i>(acfm)</i>	Temperature <i>(° F)</i>	Exit Velocity <i>(ft/sec)</i>

### 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)
001	MSW Landfill	5						
003	Unpaved and Paved Haul Roads (MSW Landfill)	1						
004	Solid Waste Cover Operations	1						

<b>Section N.4: Notes, Comments, and Explanations</b>

**DEP FORM 7007V**

**DEP7007V**

Division for Air Quality

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

**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 Dozit Landfill

KY EIS (AFS) #: 21- 225-00061

Permit #: V-18-029

Agency Interest (AI) ID: 15674

Date: 5-May-23

**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)
001	MSW Landfill	40 CFR Part 63 Subpart AAAA	NMOC	None since NMOC emissions are <34 Mg/year		<34 mg/yr	Conduct Tier 2 test every five years
001	MSW Landfill	40 CFR 63 Subpart AAAA	HAPs	None since NMOC emissions are <34 Mg/year		None since NMOC emissions are <34 Mg/yr	N/A
001	MSW Landfill	40 CFR 61 Subpart M	Asbestos	Multiple -see current Title 5 permit		Multiple -see current Title 5 permit	Multiple -see current Title 5 permit
003	Haul Roads	401 KAR 63:010	Fugitive Dust	No fugitive VE Past Property line			Daily visual observations when site is open
004	Site Construction	401 KAR 63:010	Fugitive Dust	Prevent airborne PM			Daily visual observations when site is open

**Section V.2: Monitoring Requirements**

<b>Emission Unit #</b>	<b>Emission Unit Description</b>	<b>Pollutant</b>	<b>Applicable Regulation or Requirement</b>	<b>Parameter Monitored</b>	<b>Description of Monitoring</b>
001	MSW Landfill	NMOC	40 CFR 63 Subpart AAAA	NMOC Concentration	Conduct Tier 2 testing every 5 years to obtain updated NMOC concentration.
003	Paved & Unpaved Haul Roads	Fugitive PM	401 KAR 63:010	Fugitive PM	Daily visual observations when site is operating
004	Site Construction	Fugitive PM	401 KAR 63:010	Fugitive PM	Daily visual observations when site is operating

**Section V.3: Recordkeeping Requirements**

<b>Emission Unit #</b>	<b>Emission Unit Description</b>	<b>Pollutant</b>	<b>Applicable Regulation or Requirement</b>	<b>Parameter Recorded</b>	<b>Description of Recordkeeping</b>
001	MSW Landfill	NMOC	40 CFR 63 Subpart AAAA	Multiple	See current Title 5 permit
003	Paved & Unpaved Haul Roads	Fugitive PM	401 KAR 63:010	Fugitive Dust	Record daily observations for fugitive emissions when site is open
004	Site Construction	Fugitive PM	401 KAR 63:010	Fugitive Dust	Record daily observations for fugitive emissions when site is open

## Section V.4: Reporting Requirements


Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Reported	Description of Reporting
001	MSW Landfill	NMOC	40 CFR 62 Subpart OOO	NMOC	Tier 2 Test Report every 5 years
003	Paved & Unpaved Haul Roads	Fugitive PM	401 KAR 63:010	Fugitive PM	Semiannual Title 5 Operating Report
004	Site Construction	Fugitive PM	401 KAR 63:010	Fugitive PM	Semiannual Title 5 Operating Report
ALL	ALL	ALL	401 KAR 52:020	ALL	Annual Emissions Report

**Section V.5: Testing Requirements**

<b>Emission Unit #</b>	<b>Emission Unit Description</b>	<b>Pollutant</b>	<b>Applicable Regulation or Requirement</b>	<b>Parameter Tested</b>	<b>Description of Testing</b>
001	MSW Landfill	Sulfur	401 KAR 50:045	Sulfur	Conduct sulfur sample for lab analysis in conjunction with Tier 2 Test
001	MSW Landfill	NMOC	40 CFR 62 Subpart OOO	NMOC Concentration	See Tier 2 testing procedure

Section V.6: Notes, Comments, and Explanations

**DEP FORM 7007CC**

Division for Air Quality  Submit to the Regional Office identified in your permit	<b>DEP7007CC</b> <b>Compliance Certification</b> ____ 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
<b>Section CC.1: Source Information</b>	
1) Source Name Republic Services of KY, LLC - Dozit Landfill	2) Agency Interest (AI) ID <div style="text-align: right;">15674</div>
3) Source Location Address (street, city, state, zip) 4075 State Route 360, Morganfield, KY 42347	
4) Technical Contact (name, e-mail, phone #) Branham Lafferty, BLafferty@republicservices.com, (618) 936-4379	
5) Permit Number(s) <div style="text-align: center;">V-18-029</div>	6) County <div style="text-align: center;">Union</div>
7) KY EIS (AFS) # <div style="text-align: center;">21- 225-00061</div>	
8) Submittal Information  Are you certifying any requirement(s) as "not in continuous compliance?" <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No      What is the reporting period? <div style="display: inline-block; text-align: center;">____ N/A ____</div> TO / Renewal <div style="display: inline-block; text-align: center;">____ mm/ ____ dd/ ____ yy</div>	
<b>Section CC.2: Signature Block</b>	
9) CERTIFICATION SIGNATURE <i>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.</i>	
BY:  <div style="text-align: center;">AUTHORIZED SIGNATURE</div>  <div style="text-align: center;">Branham R. Lafferty</div> <div style="text-align: center;">TYPED OR PRINTED NAME OF SIGNATORY</div>	<div style="text-align: center;">5/12/23</div> <div style="text-align: center;">DATE</div>  <div style="text-align: center;">Environmental Manager</div> <div style="text-align: center;">TITLE OF SIGNATORY</div>

**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)
001	Section B, Condition 1.a (Operating Limitations), 40 CFR 60 Subpart WWW	Municipal Solid Waste (MSW) Landfill	Comply with 40 CFR 60.752(b) or calculate NMOC emissions rate using 40 CFR 60.754	NMOC < 50 Mg/year (now 34 Mg/year under the Federal Plan)	N/A - Title 5 Air Operating Permit Renewal Application
001	Section B, Condition 1.b (Operating Limitations), 40 CFR 61 Subpart M	Municipal Solid Waste (MSW) Landfill	Cover asbestos waste with 6 inches of non-asbestos material by end of working day	None	N/A - Title 5 Air Operating Permit Renewal Application
001	Section B, Condition 1.c. (Operating Limitations), Preclude 40 CFR 63 Subpart AAAA	Municipal Solid Waste (MSW) Landfill	Do not add liquids other than leachate in a controlled fashion to the waste mass	N/A	N/A - Title 5 Air Operating Permit Renewal Application
001	Section B, Condition 1.d (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
001	Section B, Condition 1.e (Operating Limitations), 40 CFR 60 Subpart WWW	Municipal Solid Waste (MSW) Landfill	Modify air operating permit to incorporate NSPS reqmnt's when NMOC > 50 Mg/yr	NMOC < 50 Mg/year (now 34 Mg/year under the Federal Plan)	N/A - Title 5 Air Operating Permit Renewal Application
001, 003, 004	Section B, Condition 1.f (EU 001), 1.a (EU 003 & 004) (Operating Limitations), 401 KAR 63:010	Municipal Solid Waste (MSW) Landfill, 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.** *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)
001, 003, 004	Section B, Condition 2 (Emissions Limitations - EU 001, 003 & 004 ) & Condition 4 (Testing Requirements - EU 003 & 004), 401 KAR 63:010	Municipal Solid Waste (MSW) Landfill, Paved and Unpaved Haul Roads & Site Construction/Operation	Perform VE for dust daily when site is operating	None	N/A - Title 5 Air Operating Permit Renewal Application
001	Section B, Condition 3.a & d (Testing Requirements), 40 CFR 60.754	Municipal Solid Waste (MSW) Landfill	Use Tier 2 sample procedures if site elects to recalculate NMOC emissions. Test for Sulfur.	NMOC < 50 Mg/year (now <34 Mg/year under the Federal Plan); Total Sulfur < 5 ppm	N/A - Title 5 Air Operating Permit Renewal Application
001	Section B, Condition 4 (Specific Monitoring Requirements).	Municipal Solid Waste (MSW) Landfill	Monitor waste acceptance on a daily basis	Not Applicable	N/A - Title 5 Air Operating Permit Renewal Application
01	Section B, Condition 5 (Specific Recordkeeping Requirements).	Municipal Solid Waste (MSW) Landfill	Recordkeeping Requirements for Landfill NSPS and Asbestos NESHAP	Not Applicable	N/A - Title 5 Air Operating Permit Renewal Application
01	Section B, Condition 6 (Specific Reporting Requirements).	Municipal Solid Waste (MSW) Landfill	Reporting Requirements for Landfill NSPS and Asbestos NESHAP	Not Applicable	N/A - Title 5 Air Operating Permit Renewal Application
003 & 004	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

**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)
003 & 004	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
003 & 004	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
ALL	Section D, Source Emission Limitations and Testing Requirements	ALL	Compliance is based on emissions and processing rates for 12 consecutive months	Not Applicable	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

**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)
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
General	Section B, Condition 5.k (Recordkeeping), 40 CFR 61.154	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
001	Updates to Landfill NESHAP (40 CFR 63 Subpart AAAAA) 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
001	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
001	Section B, Condition 1.a.ii (Operating Limitations) - Comply with 40 CFR 60.752(b)(2), etc. when NMOC emissions are greater than 50 Mg/year	Municipal Solid Waste (MSW) Landfill	N/A - Title 5 Air Operating Permit Renewal Application
001	Section B, Conditions 5.d & 6.d (Recordkeeping & Reporting), 40 CFR 61.154: submit copy of records of asbestos disposal location to Agency upon closure of landfill	Municipal Solid Waste (MSW) Landfill	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 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. (such as test methods, monitoring procedures, recordkeeping and reporting)
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*****Emission Units Not in Continuous Compliance (continued)***

**10c)(2) Emission Units Not in Continuous Compliance.** *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.*

Emission Unit/Permit ID#	Description of duration, magnitude, and reason(s) for non-compliance and corrective steps taken or planned.

**Section CC.4: Notes, Comments, and Explanations**


**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 Dozit Landfill****KY EIS (AFS) #:****21- 225-00061****Permit #:****V-18-029****Agency Interest (AI) ID:****15674****Date:****5-May-23****Section DD.1: Table of Insignificant Activities**

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

<b>Insignificant Activity #</b>	<b>Description of Activity including Rated Capacity</b>	<b>Serial Number or Other Unique Identifier</b>	<b>Applicable Regulation(s)</b>	<b>Calculated Emissions</b>
1	Leachate Storage Tank (100,000 gallons)		None	
2	One Office heater (propane; 01.25 mmBTU/hr)		None	
3	Two Diesel Storage Tanks 550 gal & 10,000 gal (currently empty)		None	
4	One Propane Storage Tank (500 gal)		None	
5	Three Used Oil Tanks (currently empty)		None	

Insignificant Activity #	Description of Activity including Rated Capacity	Serial Number or Other Unique Identifier	Applicable Regulation(s)	Calculated Emissions
6	Twelve (12) Passive gas vents		None	

**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:



Authorized Signature

5/12/23

Date

Branham Lafferty

Type/Print Name of Signatory

Environmental Manager

Title of Signatory

**Section DD.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 Dozit Landfill**

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

<b>Emission Unit ID No., or activity to which requirement does <u>not</u> apply</b>	<b>Citation</b>	<b>Brief description of requirement</b>	<b>Why the requirement does not apply</b>
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	Union 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

<b>Emission Unit ID No., or activity to which requirement does <u>not</u> apply</b>	<b>Citation</b>	<b>Brief description of requirement</b>	<b>Why the requirement does not apply</b>
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 Dozit Landfill**

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

<b>Unit Ref. No., or activity to which requirement does not apply</b>	<b>Citation</b>	<b>Brief description of requirement</b>	<b>Why the requirement does not apply</b>
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. Calculations demonstrating this can be provided upon request. For NSPS Subpart WWW, a sunset date now makes the Federal Plan applicable instead.
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)
	40 CFR 63 Subparts B –	MACT standard for	Different source category.

Unit Ref. No., or activity to which requirement does <b>not</b> apply	Citation	Brief description of requirement	Why the requirement does not apply
All Activities	Z, AA – YY, CCC – XXX, CCCC – YYYY, AAAAA – ZZZZZ, AAAAAA – ZZZZZZ, and AAAAAAA – HHHHHHH	multiple source categories.	Note that although AAAA also does not currently apply, a reference to it should remain in the permit in the event that future Tier 2 testing shows NMOC emissions greater than 50 Mg/year.
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.

<b>Unit Ref. No., or activity to which requirement does not apply</b>	<b>Citation</b>	<b>Brief description of requirement</b>	<b>Why the requirement does not apply</b>
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: Dozit TV Renewal Application

### LANDFILL CHARACTERISTICS

Landfill Open Year **1975**  
 Landfill Closure Year (with 80-year limit) **2016**

### MODEL PARAMETERS

Methane Generation Rate, k **0.040** *year-1*  
 Potential Methane Generation Capacity, L0 **100** *m3/Mg*  
 NMOC Concentration **211** *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)
1975	57,370	63,107	0	0
1976	57,330	63,063	57,370	63,107
1977	57,400	63,140	114,700	126,170
1978	57,400	63,140	172,100	189,310
1979	57,300	63,030	229,500	252,450
1980	57,400	63,140	286,800	315,480
1981	57,400	63,140	344,200	378,620
1982	57,300	63,030	401,600	441,760
1983	57,400	63,140	458,900	504,790
1984	57,400	63,140	516,300	567,930
1985	57,400	63,140	573,700	631,070
1986	57,300	63,030	631,100	694,210
1987	57,400	63,140	688,400	757,240
1988	57,400	63,140	745,800	820,380
1989	57,300	63,030	803,200	883,520
1990	57,400	63,140	860,500	946,550
1991	57,400	63,140	917,900	1,009,690
1992	57,700	63,470	975,300	1,072,830
1993	57,000	62,700	1,033,000	1,136,300
1994	90,000	99,000	1,090,000	1,199,000
1995	88,000	96,800	1,180,000	1,298,000
1996	82,822	91,104	1,268,000	1,394,800
1997	93,538	102,892	1,350,822	1,485,904
1998	114,870	126,357	1,444,360	1,588,796
1999	80,771	88,848	1,559,230	1,715,153
2000	78,665	86,532	1,640,001	1,804,001
2001	97,353	107,088	1,718,666	1,890,533
2002	117,241	128,965	1,816,019	1,997,621
2003	113,892	125,281	1,933,260	2,126,586
2004	119,760	131,736	2,047,152	2,251,867
2005	114,334	125,767	2,166,912	2,383,603
2006	102,607	112,868	2,281,246	2,509,371
2007	88,103	96,913	2,383,853	2,622,238
2008	81,824	90,006	2,471,956	2,719,152
2009	74,181	81,599	2,553,780	2,809,158
2010	93,586	102,945	2,627,961	2,890,757
2011	88,784	97,662	2,721,547	2,993,702
2012	70,449	77,494	2,810,331	3,091,364
2013	62,374	68,611	2,880,780	3,168,858
2014	63,356	69,692	2,943,154	3,237,469
2015	34,320	37,752	3,006,510	3,307,161
2016	0	0	3,040,830	3,344,913

## Results

Year	Total landfill gas			Methane		
	(Mg/year)	(m3/year)	(av ft <sup>3</sup> /min)	(Mg/year)	(m3/year)	(av ft <sup>3</sup> /min)
1975	0	0	0	0	0	0
1976	5.630E+02	4.508E+05	3.029E+01	1.504E+02	2.254E+05	1.514E+01
1977	1.103E+03	8.836E+05	5.937E+01	2.948E+02	4.418E+05	2.968E+01
1978	1.623E+03	1.300E+06	8.735E+01	4.336E+02	6.500E+05	4.367E+01
1979	2.123E+03	1.700E+06	1.142E+02	5.671E+02	8.500E+05	5.711E+01
1980	2.602E+03	2.084E+06	1.400E+02	6.951E+02	1.042E+06	7.000E+01
1981	3.063E+03	2.453E+06	1.648E+02	8.183E+02	1.226E+06	8.241E+01
1982	3.507E+03	2.808E+06	1.887E+02	9.366E+02	1.404E+06	9.433E+01
1983	3.931E+03	3.148E+06	2.115E+02	1.050E+03	1.574E+06	1.058E+02
1984	4.340E+03	3.476E+06	2.335E+02	1.159E+03	1.738E+06	1.168E+02
1985	4.734E+03	3.790E+06	2.547E+02	1.264E+03	1.895E+06	1.273E+02
1986	5.111E+03	4.093E+06	2.750E+02	1.365E+03	2.046E+06	1.375E+02
1987	5.473E+03	4.383E+06	2.945E+02	1.462E+03	2.191E+06	1.472E+02
1988	5.822E+03	4.662E+06	3.132E+02	1.555E+03	2.331E+06	1.566E+02
1989	6.157E+03	4.930E+06	3.312E+02	1.645E+03	2.465E+06	1.656E+02
1990	6.478E+03	5.187E+06	3.485E+02	1.730E+03	2.593E+06	1.743E+02
1991	6.787E+03	5.435E+06	3.652E+02	1.813E+03	2.717E+06	1.826E+02
1992	7.084E+03	5.673E+06	3.811E+02	1.892E+03	2.836E+06	1.906E+02
1993	7.372E+03	5.904E+06	3.967E+02	1.969E+03	2.952E+06	1.983E+02
1994	7.643E+03	6.120E+06	4.112E+02	2.041E+03	3.060E+06	2.056E+02
1995	8.226E+03	6.587E+06	4.426E+02	2.197E+03	3.294E+06	2.213E+02
1996	8.767E+03	7.020E+06	4.717E+02	2.342E+03	3.510E+06	2.358E+02
1997	9.236E+03	7.396E+06	4.969E+02	2.467E+03	3.698E+06	2.485E+02
1998	9.792E+03	7.841E+06	5.268E+02	2.616E+03	3.920E+06	2.634E+02
1999	1.054E+04	8.436E+06	5.668E+02	2.814E+03	4.218E+06	2.834E+02
2000	1.091E+04	8.740E+06	5.872E+02	2.915E+03	4.370E+06	2.936E+02
2001	1.126E+04	9.015E+06	6.057E+02	3.007E+03	4.508E+06	3.029E+02
2002	1.177E+04	9.427E+06	6.334E+02	3.145E+03	4.713E+06	3.167E+02
2003	1.246E+04	9.979E+06	6.705E+02	3.329E+03	4.989E+06	3.352E+02
2004	1.309E+04	1.048E+07	7.043E+02	3.497E+03	5.241E+06	3.521E+02
2005	1.375E+04	1.101E+07	7.399E+02	3.673E+03	5.506E+06	3.700E+02
2006	1.434E+04	1.148E+07	7.713E+02	3.829E+03	5.739E+06	3.856E+02
2007	1.478E+04	1.184E+07	7.952E+02	3.948E+03	5.918E+06	3.976E+02
2008	1.506E+04	1.206E+07	8.105E+02	4.024E+03	6.032E+06	4.053E+02
2009	1.528E+04	1.223E+07	8.219E+02	4.081E+03	6.117E+06	4.110E+02
2010	1.541E+04	1.234E+07	8.289E+02	4.115E+03	6.168E+06	4.144E+02
2011	1.572E+04	1.259E+07	8.458E+02	4.199E+03	6.294E+06	4.229E+02
2012	1.598E+04	1.279E+07	8.595E+02	4.267E+03	6.396E+06	4.298E+02
2013	1.604E+04	1.284E+07	8.630E+02	4.284E+03	6.422E+06	4.315E+02
2014	1.602E+04	1.283E+07	8.621E+02	4.280E+03	6.415E+06	4.310E+02
2015	1.602E+04	1.283E+07	8.617E+02	4.278E+03	6.413E+06	4.309E+02
2016	1.573E+04	1.259E+07	8.461E+02	4.200E+03	6.296E+06	4.230E+02
2017	1.511E+04	1.210E+07	8.129E+02	4.036E+03	6.049E+06	4.064E+02
2018	1.452E+04	1.162E+07	7.810E+02	3.877E+03	5.812E+06	3.905E+02
2019	1.395E+04	1.117E+07	7.504E+02	3.725E+03	5.584E+06	3.752E+02
2020	1.340E+04	1.073E+07	7.210E+02	3.579E+03	5.365E+06	3.605E+02
2021	1.287E+04	1.031E+07	6.927E+02	3.439E+03	5.155E+06	3.464E+02
2022	1.237E+04	9.905E+06	6.655E+02	3.304E+03	4.953E+06	3.328E+02
2023	1.189E+04	9.517E+06	6.394E+02	3.175E+03	4.758E+06	3.197E+02
2024	1.142E+04	9.144E+06	6.144E+02	3.050E+03	4.572E+06	3.072E+02
2025	1.097E+04	8.785E+06	5.903E+02	2.931E+03	4.393E+06	2.951E+02
2026	1.054E+04	8.441E+06	5.671E+02	2.816E+03	4.220E+06	2.836E+02
2027	1.013E+04	8.110E+06	5.449E+02	2.705E+03	4.055E+06	2.724E+02
2028	9.731E+03	7.792E+06	5.235E+02	2.599E+03	3.896E+06	2.618E+02
2029	9.349E+03	7.486E+06	5.030E+02	2.497E+03	3.743E+06	2.515E+02
2030	8.982E+03	7.193E+06	4.833E+02	2.399E+03	3.596E+06	2.416E+02

## Results (Continued)

Year	Carbon dioxide			NMOC		
	(Mg/year)	(m3/year)	(av ft <sup>3</sup> /min)	(Mg/year)	(m3/year)	(av ft <sup>3</sup> /min)
1975	0	0	0	0	0	0
1976	4.126E+02	2.254E+05	1.514E+01	3.413E-01	9.521E+01	6.397E-03
1977	8.087E+02	4.418E+05	2.968E+01	6.689E-01	1.866E+02	1.254E-02
1978	1.190E+03	6.500E+05	4.367E+01	9.842E-01	2.746E+02	1.845E-02
1979	1.556E+03	8.500E+05	5.711E+01	1.287E+00	3.591E+02	2.412E-02
1980	1.907E+03	1.042E+06	7.000E+01	1.577E+00	4.401E+02	2.957E-02
1981	2.245E+03	1.226E+06	8.241E+01	1.857E+00	5.181E+02	3.481E-02
1982	2.570E+03	1.404E+06	9.433E+01	2.126E+00	5.930E+02	3.984E-02
1983	2.881E+03	1.574E+06	1.058E+02	2.383E+00	6.649E+02	4.467E-02
1984	3.181E+03	1.738E+06	1.168E+02	2.631E+00	7.340E+02	4.932E-02
1985	3.469E+03	1.895E+06	1.273E+02	2.869E+00	8.005E+02	5.379E-02
1986	3.746E+03	2.046E+06	1.375E+02	3.098E+00	8.644E+02	5.808E-02
1987	4.011E+03	2.191E+06	1.472E+02	3.318E+00	9.256E+02	6.219E-02
1988	4.267E+03	2.331E+06	1.566E+02	3.529E+00	9.846E+02	6.615E-02
1989	4.512E+03	2.465E+06	1.656E+02	3.732E+00	1.041E+03	6.996E-02
1990	4.747E+03	2.593E+06	1.743E+02	3.927E+00	1.095E+03	7.361E-02
1991	4.974E+03	2.717E+06	1.826E+02	4.114E+00	1.148E+03	7.712E-02
1992	5.192E+03	2.836E+06	1.906E+02	4.294E+00	1.198E+03	8.050E-02
1993	5.403E+03	2.952E+06	1.983E+02	4.469E+00	1.247E+03	8.377E-02
1994	5.601E+03	3.060E+06	2.056E+02	4.633E+00	1.293E+03	8.684E-02
1995	6.029E+03	3.294E+06	2.213E+02	4.987E+00	1.391E+03	9.348E-02
1996	6.425E+03	3.510E+06	2.358E+02	5.315E+00	1.483E+03	9.962E-02
1997	6.769E+03	3.698E+06	2.485E+02	5.599E+00	1.562E+03	1.050E-01
1998	7.176E+03	3.920E+06	2.634E+02	5.936E+00	1.656E+03	1.113E-01
1999	7.721E+03	4.218E+06	2.834E+02	6.386E+00	1.782E+03	1.197E-01
2000	7.999E+03	4.370E+06	2.936E+02	6.617E+00	1.846E+03	1.240E-01
2001	8.251E+03	4.508E+06	3.029E+02	6.825E+00	1.904E+03	1.279E-01
2002	8.628E+03	4.713E+06	3.167E+02	7.137E+00	1.991E+03	1.338E-01
2003	9.133E+03	4.989E+06	3.352E+02	7.554E+00	2.107E+03	1.416E-01
2004	9.594E+03	5.241E+06	3.521E+02	7.935E+00	2.214E+03	1.487E-01
2005	1.008E+04	5.506E+06	3.700E+02	8.337E+00	2.326E+03	1.563E-01
2006	1.051E+04	5.739E+06	3.856E+02	8.690E+00	2.424E+03	1.629E-01
2007	1.083E+04	5.918E+06	3.976E+02	8.960E+00	2.500E+03	1.679E-01
2008	1.104E+04	6.032E+06	4.053E+02	9.132E+00	2.548E+03	1.712E-01
2009	1.120E+04	6.117E+06	4.110E+02	9.261E+00	2.584E+03	1.736E-01
2010	1.129E+04	6.168E+06	4.144E+02	9.339E+00	2.605E+03	1.751E-01
2011	1.152E+04	6.294E+06	4.229E+02	9.530E+00	2.659E+03	1.786E-01
2012	1.171E+04	6.396E+06	4.298E+02	9.684E+00	2.702E+03	1.815E-01
2013	1.176E+04	6.422E+06	4.315E+02	9.724E+00	2.713E+03	1.823E-01
2014	1.174E+04	6.415E+06	4.310E+02	9.713E+00	2.710E+03	1.821E-01
2015	1.174E+04	6.413E+06	4.309E+02	9.709E+00	2.709E+03	1.820E-01
2016	1.152E+04	6.296E+06	4.230E+02	9.533E+00	2.659E+03	1.787E-01
2017	1.107E+04	6.049E+06	4.064E+02	9.159E+00	2.555E+03	1.717E-01
2018	1.064E+04	5.812E+06	3.905E+02	8.800E+00	2.455E+03	1.650E-01
2019	1.022E+04	5.584E+06	3.752E+02	8.455E+00	2.359E+03	1.585E-01
2020	9.821E+03	5.365E+06	3.605E+02	8.123E+00	2.266E+03	1.523E-01
2021	9.436E+03	5.155E+06	3.464E+02	7.805E+00	2.177E+03	1.463E-01
2022	9.066E+03	4.953E+06	3.328E+02	7.499E+00	2.092E+03	1.406E-01
2023	8.710E+03	4.758E+06	3.197E+02	7.205E+00	2.010E+03	1.351E-01
2024	8.369E+03	4.572E+06	3.072E+02	6.922E+00	1.931E+03	1.298E-01
2025	8.041E+03	4.393E+06	2.951E+02	6.651E+00	1.855E+03	1.247E-01
2026	7.725E+03	4.220E+06	2.836E+02	6.390E+00	1.783E+03	1.198E-01
2027	7.423E+03	4.055E+06	2.724E+02	6.139E+00	1.713E+03	1.151E-01
2028	7.131E+03	3.896E+06	2.618E+02	5.899E+00	1.646E+03	1.106E-01
2029	6.852E+03	3.743E+06	2.515E+02	5.667E+00	1.581E+03	1.062E-01
2030	6.583E+03	3.596E+06	2.416E+02	5.445E+00	1.519E+03	1.021E-01

Calculate Fugitive NMOC Emissions (assuming a 0% collection efficiency) in 2023 (maximum year of emissions):

$$\begin{array}{rclcl}
 7.20 & \text{Mg/year} * & 1.00 & = & 7.20 \text{ Mg/year} \\
 & & & & 7.93 \text{ tons/year} \\
 & & & & 15850.38 \text{ lbs/year}
 \end{array}$$

Calculate mmscf LFG/year produced:

$$\begin{array}{rclcl}
 639.44 & \text{cfm} * 60 & \text{min/hr} * & 8760 & \text{hrs/year} = 336,091,658 \text{ cf/year} \\
 & & & & 336.09 \text{ mmscf/year}
 \end{array}$$

Calculate emissions factors for NMOC, in terms of mmscf LFG produced:

$$15850.38 \text{ lbs/year} / 336.09 \text{ mmscf/year} = \mathbf{47.16 \text{ lbs NMOC/mmscf LFG produced}}$$

Calculate emissions factors for CO2 and Methane, in terms of mmscf LFG produced:

CO2

$$\begin{array}{rclcl}
 8710.40 & \text{Mg/year} * & 1.10 & \text{tons/Mg} = & 9,581 \text{ tons/year} \\
 & & & & 19,162,874 \text{ lbs/year}
 \end{array}$$

$$19,162,874 \text{ lbs/year} / 336.09 \text{ mmscf/year} = \mathbf{57,017 \text{ lbs CO2/mmscf LFG}}$$

CH4

$$\begin{array}{rclcl}
 3174.61 & \text{Mg/year} * & 1.10 & \text{tons/Mg} = & 3,492 \text{ tons/year} \\
 & & & & 6,984,151 \text{ lbs/year}
 \end{array}$$

Use 10% Cover Oxidation Factor from 40 CFR 98:

$$\begin{array}{rcl}
 6,285,736 & \text{lbs/year CH4} \\
 3,143 & \text{tons/year CH4}
 \end{array}$$

$$6,285,736 \text{ lbs/year} / 336.09 \text{ mmscf/year} = \mathbf{18,702 \text{ lbs CH4/mmscf LFG}}$$

Calculate emissions factors for H2S, in terms of mmscf LFG produced (use 2021 tested analytical values):

$$\begin{array}{rclcl}
 \frac{3.53 \text{ ppm H2S} *}{1000000} & \frac{34.08 \text{ mol. Wt. H2S} *}{385.4 \text{ scf/lb-mole}} & 336,091,658 \text{ scf/yr} & & 0.0525 \text{ tons/year} \\
 & & = & & 104.9108 \text{ lbs H2S/year} \\
 & & = & & \mathbf{0.3121 \text{ lbs H2S/mmscf}}
 \end{array}$$

## Dozit Landfill: Landfill HAPs Emissions Title 5 Renewal Application

2023 Fugitive Gas Production Rate = 639 cfm = 9,518,257 m<sup>3</sup>/year  
(Max year over next five year TV Renewal Period) 337.01 mmscf

UNCONTROLLED LANDFILL GAS CONCENTRATIONS (a) - (SCC 50200602)							
CAS number	COMPOUND	Concentration ppmv*	MOLECULAR WEIGHT	GRAVIMETRIC CONCENTRATION (mg/M <sup>3</sup> )	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	0.0249	0.0063	0.0275
79345	1,1,2,2-Tetrachloroethane	1.11	167.86	7.62	0.0725	0.0183	0.0800
75343	1,1-Dichloroethane (ethylidene dichloride)	2.35	98.96	9.51	0.0905	0.0228	0.0999
75354	1,1-Dichloroethene (vinylidene chloride)	0.20	96.95	0.79	0.0075	0.0019	0.0083
107062	1,2-Dichloroethane (ethylene dichloride)	0.41	98.96	1.66	0.0158	0.0040	0.0174
78875	1,2-Dichloropropane (propylene dichloride)	0.18	112.99	0.83	0.0079	0.0020	0.0087
107131	Acrylonitrile	6.33	53.06	13.74	0.1308	0.0329	0.1443
75150	Carbon disulfide	0.58	76.14	1.81	0.0172	0.0043	0.0190
56235	Carbon tetrachloride	0.00	153.84	0.00	0.0000	0.0000	0.0000
463581	Carbonyl sulfide	0.49	60.07	1.20	0.0115	0.0029	0.0126
108907	Chlorobenzene	0.25	112.56	1.15	0.0110	0.0028	0.0121
75003	Chloroethane (ethyl chloride)	1.25	64.52	3.30	0.0314	0.0079	0.0346
67663	Chloroform	0.03	119.39	0.15	0.0014	0.0004	0.0015
75092	Dichloromethane (methylene chloride)	14.30	84.94	49.68	0.4729	0.1191	0.5217
100414	Ethylbenzene	4.61	106.16	20.02	0.1905	0.0480	0.2102
110543	Hexane	6.57	86.17	23.15	0.2204	0.0555	0.2432
108101	Methyl isobutyl ketone	1.87	100.07	7.65	0.0728	0.0184	0.0804
127184	Perchloroethylene (tetrachloroethene)	3.73	165.85	25.30	0.2408	0.0607	0.2657
79016	Trichloroethylene	2.82	131.39	15.15	0.1442	0.0363	0.1591
75014	Vinyl chloride	7.34	62.50	18.76	0.1786	0.0450	0.1970
71432	Benzene	1.91	78.11	6.10	0.0581	0.0146	0.0641
74873	Methyl chloride (Chloromethane)	1.21	50.49	2.50	0.0238	0.0060	0.0262
108883	Toluene	39.30	92.13	148.09	1.4095	0.3551	1.5551
1330207	Xylene (isomers and mixtures)	12.10	106.16	52.54	0.5001	0.1260	0.5517
	Mercury Compounds *	0.00	200.61	0.00	0.0000	0.0000	0.0000
<b>Total HAPs:</b>							<b>4.34</b>

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

Calculate emissions factors in terms of lbs pollutant/mmscf LFG for pollutants greater than 1/2 ton/year PTE:

Toluene	9.2290 lbs/mmscf LFG
Xylene	3.2742 lbs/mmscf LFG
Dichloromethane	3.0960 lbs/mmscf LFG

Calculate emissions factors for other HAPs listed in the KDEP inventory:

Ethyl Benzene	1.2474 lbs/mmscf LFG
1,2-Dichloroethane	0.1034 lbs/mmscf LFG

## **APPENDIX B**

### **Emissions Calculations – Insignificant Activities**

**Dozit Landfill**  
**Leachate Tank Emissions Calculations**  
**TV Renewal Application**

**Assumptions:**

1. Emissions are based on gallons of leachate through the tank: 2,500,000 gallons leachate
2. Throughput is per 1000 gallons: 2,500.0 1000 gallons
2. Factor used is 0.133 lbs VOC /1000 gallons of leachate through tank.

**Calculate Emissions:**

$$2,500 \quad 1000 \text{ gallons leachate} \quad 0.133 \quad \frac{\text{lbs VOC}}{1000 \text{ gal leach}} * \frac{1 \text{ ton}}{2000 \text{ lbs}} = 0.1663 \quad \frac{\text{tons VOC}}{\text{year}}$$

**Dozit Landfill Passive Gas Vents (12 total)**  
**Calculation of Potential Emissions**  
**Title V Operating Permit Renewal Application**

**Assumptions:**

NMOC 211.2 ppm as hexane (Tier 2 Test 9/2021)  
 CH<sub>4</sub>: 50%  
 CO<sub>2</sub>: 50%  
 Flow: 13 cfm (see attached flow calculations)  
780 ft<sup>3</sup>/hour

**Calculate Potential Emissions per vent:**

**NMOC**

<u>211</u>	ppm NMOC x	<u>86</u>	<u>mol. Wt. Hex. *</u>	780 scfh x	8760	<u>hrs x</u>	<u>1 T =</u>	
1,000,000		385.4	scf/lb-mole			year	2000 lbs	<b>0.161 tons/year</b>

**CH<sub>4</sub>**

<u>500000</u>	ppm CH <sub>4</sub> x	<u>16.04</u>	<u>mol. Wt. Hex. *</u>	780 scfh x	8760	<u>hrs x</u>	<u>1 T =</u>	
1,000,000		385.4	scf/lb-mole			year	2000 lbs	<b>71.094 tons/year</b>

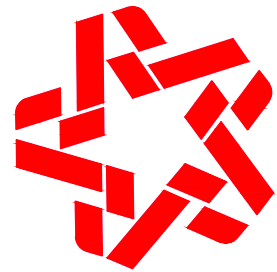
**CO<sub>2</sub>**

<u>500000</u>	ppm CO <sub>2</sub> x	<u>44.01</u>	<u>mol. Wt. Hex. *</u>	780 scfh x	8760	<u>hrs x</u>	<u>1 T =</u>	
1,000,000		385.4	scf/lb-mole			year	2000 lbs	<b>195.065 tons/year</b>

Pollutant	ONE VENT		12 VENTS	
	lbs/hour	tons/year	lbs/hour	tons/year
NMOC	0.04	0.16	0.44	1.93
CH4	16.23	71.09	194.78	853.12
CO2	44.54	195.06	534.42	2340.77

## **APPENDIX C**

### **Site Plan Map**



DOZIT COMPANY, INC.  
DOZIT LANDFILL  
PERMIT NO. 113-00005

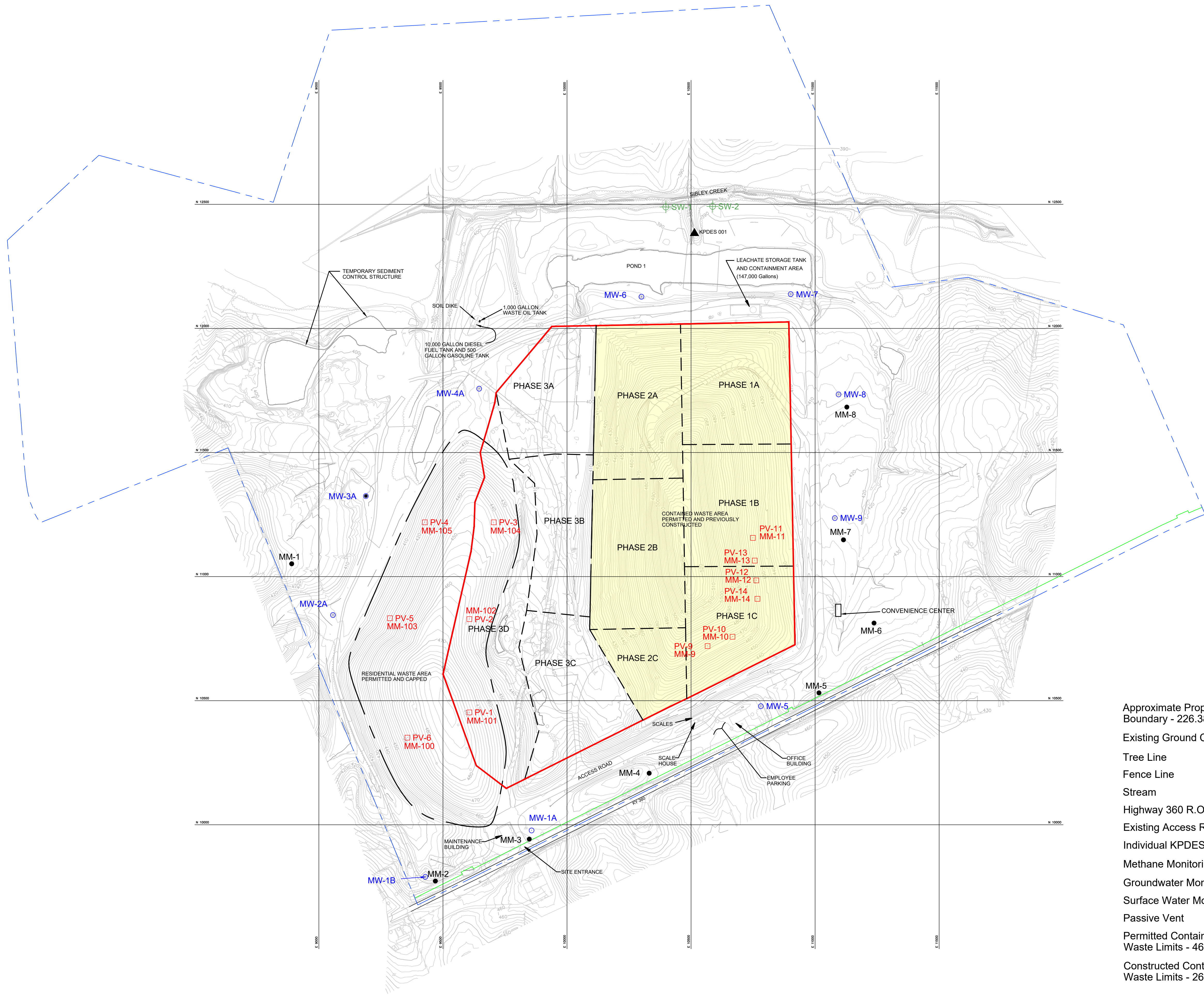
DRAWN BY: MAS	
CHECKED BY: STO	
DATE: JAN. 2023	
SCALE: 1" = 200'	
REVISIONS	

**KENVIRONS**  
Civil & Environmental Engineers



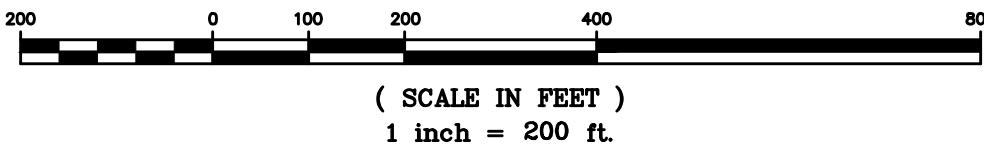
PROJECT NO.  
2017154

SHEET NO.  
1 of 1



-LEGEND-

- Approximate Property Boundary - 226.38 acres
- Existing Ground Contours
- Tree Line
- Fence Line
- Stream
- Highway 360 R.O.W.
- Existing Access Road
- Individual KPDES Sampling Point
- Methane Monitoring Well
- Groundwater Monitoring Well
- Surface Water Monitoring Point
- Passive Vent
- Permitted Contained Landfill Waste Limits - 46.8 acres
- Constructed Contained Landfill Waste Limits - 26.52 acres

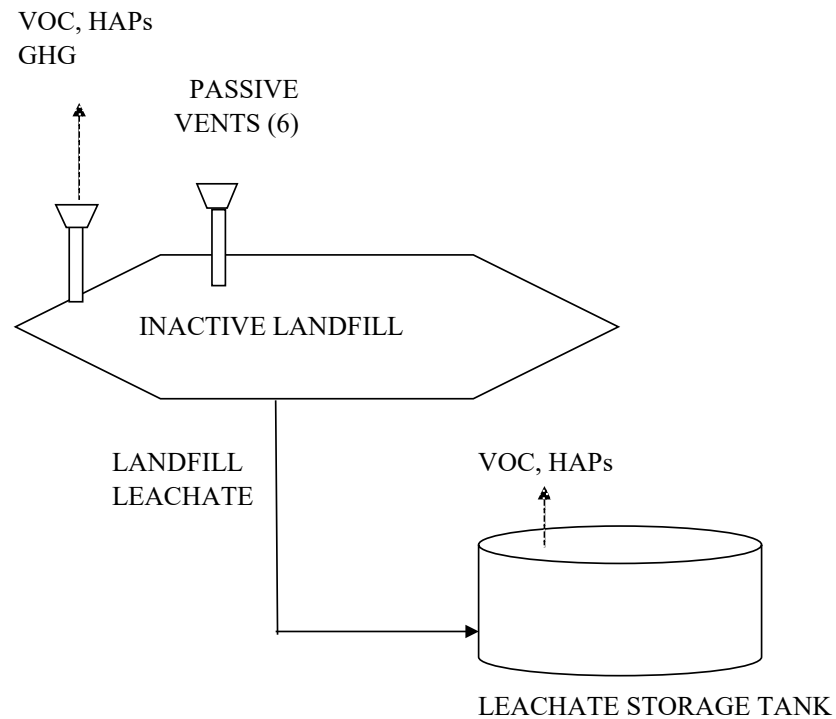


GENERAL SITE/MONITORING PLAN

AERIAL TOPOGRAPHY BASED ON SURVEY CONDUCTED JANUARY 1, 2016 BY COOPER AERIAL SURVEYS CO.

## **APPENDIX D**

### **Process Flow Diagram**



DES BY:                      LLN                      DATE: MAY 2023		DOZIT LANDFILL TITLE V RENEWAL APPLICATION MORGANFIELD, KENTUCKY	
<b>PREPARED BY:</b>  Environmental Information Logistics 130 E. Main St. Caledonia, MI 49316		<b>PROCESS FLOW DIAGRAM</b>  <b>DOZIT LANDFILL</b>	