# ALLEGHENY COUNTY HEALTH DEPARTMENT AIR QUALITY PROGRAM

July 25, 2025

SUBJECT:	Allied Waste- Imperial Landfill 11 Boggs Road Findlay Township, PA 15126 Allegheny County	
	Title V Operating Permit No. 0068- OP25	
то:	JoAnn Truchan, P.E. Program Manager, Engineering	
FROM:	Hafeez Ajenifuja Air Quality Engineer	
_	LITY DESCRIPTION:	

### **FACILITY DESCRIPTION:**

Allied Waste Systems of Pennsylvania, LLC operates Allied Waste- Imperial Landfill, a municipal solid waste landfill, in Findlay Township, Allegheny County, Pennsylvania. The landfill is approximately 803 acres in surface area and is comprised of ten (10) disposal areas and has an active landfill gas (LFG) collection system with one (1) enclosed ground flare to control the off gas emissions. Currently nine (9) disposal areas have reached full capacity and are no longer accepting waste, only one disposal area is accepting waste. The total disposal capacity of the landfill is approximately 52,300,000 tons.

The primary source of emissions at the facility is the landfill itself, which emits VOCs and HAPs as defined in CAA section 112. Since the landfill was modified after May 30, 1991, and has a design capacity of greater than 2.5 million megagrams, this facility is subject to the requirements of the Municipal Solid Waste Landfills, 40 CFR 62 Subpart OOO & CFR 63 Subpart AAAA. Pursuant to the requirements of 40 CFR 62, Subpart OOO, landfills having design capacities greater than or equal to 2.5 million megagrams must obtain a Part 70 operating permit. This facility is therefore subject to Part 70 major source operating permit requirements of \$2103.20. Notwithstanding, Imperial Landfill is a major source of CO emissions and a minor source for remaining criteria pollutants and HAP emissions, as defined at \$2102.20 (Definitions) of Article XXI. The facility is also a major source of greenhouse gas emissions (CO<sub>2</sub>e) as defined in the U.S. EPA Greenhouse Gas Tailoring Rule.

Imperial Landfill Gas Company is a subsidiary of Fortistar LLC, operates a gas-to-energy plant located on the property of Imperial Landfill, though it has no affiliation with the landfill itself. The facility processes landfill gas from Imperial Landfill to meet specific pipeline standards and injects the treated gas into a natural gas pipeline. Any process waste gas—primarily composed of CO<sub>2</sub>, nitrogen, oxygen, and small amounts of residual methane and NMOC—is directed to the gas company's thermal oxidizer or enclosed flare at Imperial Landfill.

Title V operating permit was issued to Imperial Landfill Gas Company on December 21, 2022, amended on July 15, 2024.

# **OPERATING PERMIT DESCRIPTION:**

This is a Title V renewal application for Imperial Landfill located in North Fayette Township, Allegheny County. The original operating permit was issued on June 29, 2005. It was renewed on October 5, 2011, and February 8, 2019, and was amended on December 8, 2020, to remove the requirement to measure the flue gas exit temperature.

The renewal permit will incorporate the conditions of the new federal landfill regulation 40 CFR 62 Subpart OOO and the revised 40 CFR 63 Subpart AAAA.

The following changes were made during the Title V renewal:

- 1) All references to NSPS Subpart WWW have been removed from the permit because, pursuant to 40 CFR 63.1930(b), "Beginning no later than September 27, 2021, all landfills described in §63.1935 must meet the requirements of 40 CFR 63 Subpart AAAA. The requirements of subpart AAAA always apply, including during periods of SSM, and the SSM requirements of the General Provisions of this part do not apply".
- 2) All the applicable requirements from the newly promulgated 40 CFR 62 Subpart OOO 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, have been incorporated.
- 3) Sections II & V.B. The enclosed flare P002 (6,000 SCFM) and the associated requirements were removed from the permit because it has not run consistently for an extended period of time and is no longer capable of covering the LFG capacity needed from the landfill.

### PERMIT APPLICATION COMPONENTS:

- 1. Title V Operating Permit #0068, issued June 6, 2019, amended September 14, 2020
- 2. Title V Operating Permit Renewal Application #0068, was received on January 4, 2024
- 3. Installation Permit #0068-I001, issued July 6, 1999.
- 4. Installation Permit #0068-I002. Application was submitted on June 25, 1999, for the Area 7 Landfill Gas Collection System but it was never issued.
- 5. Installation Permit #0068-I003, issued June 30, 2004.
- 6. Installation Permit #0068-I004, issued November 7, 2007, amended January 26, 2016, and May 14, 2019 (to allow the flare to combust natural gas and revised the NMOC, VOC, SO<sub>2</sub> and HAPs emissions.
- 7. Plan Approval and Agreement (RACT Order) #231A, dated April 25, 1997.
- 8. EPA determination letter, dated March 13, 2008 (alternative test method for flares)

# **Determinations**

- 1. November 29, 2009: To install a 635hp emergency generator.
  - Request for determination received on October 29, 2009
  - Exempted from permitting.
- 2. August 29, 2016: To install a 5 MMBtu/hr natural gas fired boiler.
  - Request for determination received on June 3, 2016
  - Exempted from permitting.
- 3. August 6, 2020: To increase the extraction gas well operating temperature.
  - Request for determination received on July 13, 2020
  - Exempted from permitting.

# **EMISSION SOURCES:**

Table 1
Emissions Sources

I.D.	Source Description	Control Device(s)	Maximum Capacity	Fuel/Raw Material	Stack I.D.
P001	Municipal Solid Waste Landfill	Collection System and one (1) Enclosed Ground Flare	803 acres (47.44 million megagrams)	Municipal & Non-hazardous Solid Waste	
P003	One (1) Enclosed Ground (Zink) Flare	None	6,000 scfm	Landfill Gas	S001
F001	Plant Roads and Vehicular Traffic	Fugitive Dust Control Measures	0.5 miles (paved) 2.0 miles (unpaved)		
B003	Boiler No. 1	None	5.0 MMBtu/hr	Natural Gas & Fuel Oil (as backup)	
E001	Emergency Generator - Flare	None	635 HP	Diesel Fuel - 0.5% Sulfur	-
E002	Emergency Generator – Pre-treatment Plant	None	896 HP	Diesel Fuel - 0.5% Sulfur	
E003	Miscellaneous Small Emergency Generators/Engines	None	5.5 to 78 HP	Diesel & Gasoline	
E004	Emergency Generator – Office Space	None	103 hp	Natural Gas	-

# **STACKS:**

Table 2

Stack ID	Stack Height (ft)	Stack Diameter (ft)	Exhaust Rate (acfm)	Exhaust Temp. (°F)	Lining/Outer Material
I001	60	13	265,500	1,600	Ceramic fiber

# **METHOD OF DEMONSTRATING COMPLIANCE:**

Methods of demonstrating compliance with the emission standards set in this permit are summarized in the table below. See Operating Permit No. 0068 for the specific conditions for determining compliance with the applicable requirements. Compliance with the short-term (lb/hr) limits must be maintained at all times, including startup and shutdown unless explicitly stated otherwise in the permit. Any emissions due to startup and/or shutdown are included in facility's total annual emissions.

Table 3
Method(s) of Demonstrating Compliance

Method(s) of Demonstrating Compliance				
TVOP Section	Process	Method(s) of Demonstrating Compliance		
V.A	Municipal Solid Waste Landfill	<ul> <li>Calculate the maximum expected gas generation rate.</li> <li>Measure the monthly gauge pressure in the gas collection header applied to each individual well.</li> <li>Monitor the monthly gauge pressure in the gas collection header.</li> <li>Monitor each individual well to ensure no positive pressure exist.</li> <li>Monitor each wellhead monthly for temperature for the purpose of identifying whether excess air infiltration exists.</li> <li>Monitor the monthly nitrogen or oxygen concentration in the landfill gas using EPA Method 3C or 3A of appendix A-2 to part 60.</li> <li>Monitor the surface concentrations of methane along the entire perimeter of the collection area and along a pattern that traverses the landfill at 30-meter intervals to ensure that methane concentration is below 500 ppm.</li> <li>Ensure that all collected gases are vented to the control system (enclosed flare).</li> <li>Operate each interior wellhead in the collection system with a landfill gas temperature less than 55 degrees Celsius (131°F). (RACT I Requirement)</li> <li>Operate each interior wellhead in the collection system with a landfill gas temperature less than 62.8 degrees Celsius (145 °F).</li> <li>Operate the collection system with negative pressure at each wellhead.</li> </ul>		
V.B	Enclosed Ground Flare	<ul> <li>Continuously record the flare flue gas temperature.</li> <li>Stack testing once every five years to demonstrate compliance with VOC destruction efficiency.</li> <li>Continuously monitor the temperature of the enclosed flare.</li> <li>Perform semiannual visible emission using EPA Method 22.</li> <li>Measure the gauge pressure in the gas collection header monthly.</li> </ul>		
V.C	Plant Roads and Vehicular Traffic	<ul> <li>Apply water suppression on roadways on a daily basis when the temperature is above 32 degrees Fahrenheit</li> <li>Remove any earth or other material deposited by trucking or other means on the paved roadways.</li> </ul>		

TVOP Section	Process	Method(s) of Demonstrating Compliance	
		<ul> <li>Ensure that the undercarriage, wheels, and chassis of the vehicles which were used to transport waste and earth, are washed to prevent earthen carryout onto roadways.</li> <li>Recordkeeping of daily hours of operation and dust control measures.</li> <li>Reporting of the monthly summary of the hours of operation and dust control measures taken.</li> </ul>	

# **EMISSION CALCULATIONS:**

# **Municipal Solid Waste Landfill**

Emissions from the municipal solid waste landfill are based on the Methane Generation Rate (m³/yr.) and LFG Generation Rate (m³/yr.) from LANDGEM results and are shown in Table 4.

Table 4
Municipal Solid Waste Landfill Emission Limitations

Wallerpar Solia Waste Editarin Elimssion Elimitations			
Pollutant	Annual Emission Limit (tons/year)*		
Volatile Organic Compounds	22.23		
Non-Methane Organic Compounds (NMOCs)	57.01		
Single HAP (Toluene)	4.03		

<sup>\*</sup>A year is defined as any consecutive twelve-month period.

# **Enclosed Ground Flare**

Emissions from the enclosed flare are based on IP #0068-I004 issued on November 7, 2007, and amended January 16, 2015, and May 14, 2019. Imperial Landfill operates two (2) enclosed flares rated at 6000 CFM each, however, one of the enclosed flares has been decommissioned and is no longer operating because one 6000 cfm flare is enough to accommodate the volume of landfill gas produced.

The emissions are shown in Table 5 below:

Table 5
Enclosed Flare Emission Limitations

Pollutant	Hourly Emission Limit (lb/hr)	Hourly Emission Limit NG (lbs/hr)	Annual Emission Limit (tons/year)*
Particulate Matter	3.06	0.20	13.40
PM <sub>10</sub>	3.06	0.20	13.40
Nitrogen Oxides	10.8	0.84	47.30
Sulfur Oxides	3.01	0.007	13.20
Carbon Monoxide	36.0	2.47	157.68
Volatile Organic Compound	0.38	0.07	1.66
Single HAP (HCL)	1.45		6.37
Total HAP	1.66		7.25

<sup>\*</sup> A year is defined as any consecutive 12-month period.

# **Landfill Construction and Operation Activities**

Emissions from the landfill construction and operation activities are fugitives and limits are based on AP-42, Table 11.9.1 (for overburden blasting emission), Table 11.19.2-2 (for soil screening emission) and the potential soil screening throughput. The emissions are shown in Table 6 below.

Table 6
Landfill Construction Emission Limitations

Pollutant	Annual Emission Limit (tons/year)*
Particulate Matter	36.32
$PM_{10}$	11.86

<sup>\*</sup>A year is defined as any consecutive twelve-month period.

Table 7
Paved and Unpaved Emission Limitations

Pollutant	Annual Emissions Limit (tons/year)*	
Particulate Matter	70.61	
$PM_{10}$	18.66	

<sup>\*</sup>A year is defined as any consecutive twelve-month period

# **GHG Mass and CO<sub>2</sub>e Emissions:**

# Flare calculation

Calculations of greenhouse gases (GHG) and CO<sub>2</sub>-equivalent (CO<sub>2</sub>e) emissions are based on the methodology found in 40 CFR Part 98, Subpart C, §98.33(a)(1), and factors found in Table C-1 and Table C-2 of that subpart. Greenhouse gas emissions calculations from the landfill comprise the following steps:

- Step 1: Determine the combustion CO<sub>2</sub>e emission based on the flare capacity.
- Step 2: Determine the escape CH<sub>4</sub> = Collected methane that escapes destruction in flare
- Step 3: Determine the collected or recovered CO<sub>2</sub>.
- Step 4: Determine the total potential landfill gas CO<sub>2</sub>e emission from the flare (Step 1 + Step 2 + Step 3)

Total rated heat input capacity of the flare:

Table 8

Tuble 0			
Flare	Capacity		
Enclosed Flare	6,000 CFM		
Enclosed Flare*	1,595,721.6 MMBtu/yr.		
Heating content	506 Btu/scf (adjusted for methane)		
CH <sub>4</sub> Destruction	99% (manufacturer DE for LFG Enclosed		
Efficiency	Flare		
LFG CH <sub>4</sub> Concentration	50%		
LFG CO <sub>2</sub> Concentration	43% (based on site data)		

\*Flare Capacity (cfm)× 60 min/hr × 8,760 hrs/yr × 506 btu/scf) ÷ 1,000,000 (6,000 cfm × 60 min/hr × 8,760 hrs/yr × 506 btu/scf) ÷ 1,000,000)

#### **Emission Factors:**

Table 9

Pollutants	Natural Gas
$CO_2$	52.07 kg/MMBtu
$N_2O$	6.3×10 <sup>-4</sup> kg/MMBtu
CH <sub>4</sub>	3.2×10 <sup>-3</sup> kg/MMBtu

#### Step 1: Determine the combustion CO<sub>2</sub>e emission based on the flare capacity

 $Emissions(ton/yr) = Flare\ Capacity\ (MMBtu/yr) \times Emission\ Factor\ (kg/MMBtu) \times 2.2\ lb/kg \div 2,000\ lbs/ton$ 

 $CO_2$  Emissions (tons/yr) =  $(1,595,721.6 \text{ MMBtu/yr}) \times (52.07 \text{ kg/MMBtu}) \times (2.2 \text{ lb/kg}) \div (2,000 \text{ ton/lb})$ 

# = 91,398.11 tons/year

 $N_2O$  Emissions (tons/yr.) =  $(1,595,721.6 \text{ MMBtu/yr}) \times (6.3 \times 10^{-4} \text{ kg/MMBtu}) \times (2.2 \text{ lb/kg}) \div (2,000 \text{ ton/lb})$ 

#### = 1.11 tons/yr

CH<sub>4</sub> Emissions (tons/yr) =  $(1,595,721.6 \text{ MMBtu/yr.}) \times (3.20 \times 10^{-3} \text{ kg/MMBtu}) \times (2.2 \text{ lb/kg}) \div (2,000 \text{ ton/lb})$ 

## = **5.62** tons/year

Global Warming Potential (GWP) Factors (from Part 98, Subpart A, Table A-1):

$$\begin{aligned} CO_2 &= 1 \\ N_2O &= 298 \\ CH_4 &= 25 \end{aligned}$$

Total GHG Mass Emissions for enclosed flare:

$$CO_2e = (91,398.11 \times 1) + (1.11 \times 298) + (5.62 \times 25) = 91,870.14 \text{ tons/year of } CO_2e$$

The total potential landfill gas  $CO_2e$  emission = 91,870.14 tons

# Step 2: Escape $CH_4$ = Collected methane that escapes destruction in flare

$$(6,000~\text{ft}^3/\text{min}) \times (60~\text{min/hr}) \times (8,760~\text{hrs/yr}) \times (0.50) \times (1-0.99) \times (0.0423~\text{lbs/ft}^3) \div 2000$$

 $CO_2e = 333.49 \times 25 \text{ (GWP)} = 8337.33 \text{ tons/year of } CO_2e$ 

# Step 3: Determine the amount of CO<sub>2</sub> collected or recovered.

$$(6,000 \text{ ft}^3/\text{min}) \times (60 \text{ min/hr}) \times (8,760 \text{ hrs/yr}) \times (0.43) \times (0.116 \text{ lbs./ ft}^3) \div 2000$$

**= 78,650.78** 

# Step 4: The total potential landfill gas CO<sub>2</sub>e emission from the flare

91,870.14 +333.49 +78,650.78

# $= 170,854.41 \text{ tons/year of } CO_2e$

#### **EMISSION SOURCES OF MINOR SIGNIFICANCE:**

The following sources are insignificant, and there are no applicable requirements for these sources.

- 1. One (1) Safety-Kleen pedestal spray sink washer with a degreaser opening that is less than 10 square feet.
- 2. Natural Gas Emergency Generator
- 3. Miscellaneous Combustion Units

### **REGULATORY APPLICABILITY:**

# 1. Article XXI Requirements for Issuance:

See Permit Application No. 0068 Section 5. The requirements of Article XXI, Parts B and C for the issuance of operating permits have been met for this facility. Article XXI, Part D, Part E & Part H will have the necessary sections addressed individually.

§2105.48 (Areas Subject to §2105.40 through §2105.47): The facility is located outside of the area specified in Article XXI, Section 2105.48.a. Therefore, the requirements of Article XXI, Sections §2105.40 through §2105.47, do not apply to this source.

# 2. Testing Requirements:

The facility is required to test the enclosed ground flare for compliance with the established VOC destruction efficiency (i.e., 98% by weight). Such testing will be conducted once every five years according to approved U.S. EPA test methods and Section 2108.02 of Article XXI.

The Department reserves the right to require additional testing, if necessary, in the future to assure compliance with the terms and conditions of this Title V Operating Permit.

#### 3. New Source Performance Standards (NSPS):

<u>40 CFR PART 60, Subpart WWW - Standards of Performance for Municipal Solid Waste Landfills:</u> The facility is no longer subject to the New Source Performance Standard, Subpart WWW.

On August 29, 2016, EPA issued a new Emission Guidelines (EG) for existing Municipal Solid Waste (MSW) Landfills in 40 CFR Part 60, Subpart Cf. The revised EG is intended to replace requirements under New Source Performance Standard (NSPS) WWW once implemented through revised state plans or a federal plan. All existing MSW landfills that commenced construction, modification, or reconstruction on or before July 17, 2014, became subject to the new Federal Plan at 40 CFR 62, Subpart OOO starting May 21, 2021.

# 40 CFR PART 60, Subpart Ka - Standards of Performance for Volatile Organic Liquid Storage Vessels for Petroleum Liquids:

The facility's storage tanks are not subject to the New Source Performance Standard, Subpart Ka because diesel fuel oil does not meet the definition of petroleum liquids and the storage capacities of all the tanks are less than the rule applicability threshold of 40,000 gallons. Below are the list and capacity of the facility's storage tanks:

The permittee maintains the following storage tanks. VOC emissions from these tanks are negligible, estimated to be less than 0.03 tons/yr due to the low volatility of the stored liquids.

Table 10

Source Description	Location	Maximum Capacity	Fuel/Raw Material
Leachate Storage Tank	Leachate Storage Area	1,000,000	Raw Leachate
Leachate Storage Tank	Leachate Storage Area	1,000,000	Raw Leachate
Leachate Storage Tank	Neville	2,500	Leachate
Leachate Storage Tank	Neville	2,500	Leachate
Leachate Storage Tank	Alcosan	2,500	Leachate
Leachate Storage Tank	Cell 4	5,000	Leachate

Source Description	Location	Maximum Capacity	Fuel/Raw Material
Storage Tank	Neville Cells	3,000	Oil from oil water separator
Storage Tank	Neville Cells	8,000	Leachate
Sequential Batch Reactor (SBR)	Leachate Pre-Treatment Facility	480,000	Leachate
Sequential Batch Reactor (SBR)	Leachate Pre-Treatment Facility	480,000	Leachate
Leachate Storage Tank	Leachate Pre-Treatment Facility	2,000	Leachate Mixed pH Adjustment
Leachate Storage Tank	Leachate Pre-Treatment Facility	2,000	Leachate Mixed pH Adjustment
Leachate Storage Tank	Leachate Pre-Treatment Facility	2,000	Leachate Final pH Adjustment
Leachate Storage Tank	Leachate Pre-Treatment Facility	50,000	Leachate (Post Equalization)
Leachate Storage Tank	Leachate Pre-Treatment Facility	24,000	Sludge
Leachate Storage Tank	Leachate Pre-Treatment Facility	24,000	Sludge
Storage Tank	Outside of Landfill Gas Plant	1,570	No. 2 Diesel Fuel
Storage Tank	Outside of Leachate Pre- Treatment Facility	960	No. 2 Diesel Fuel
Storage Tank	Maintenance Garage	275	Kerosine
Storage Tank	Outside of Leachate Pre- Treatment Facility	6,650	NaOH
Storage Tank	Maintenance Shop	<350	Miscellaneous Oil
Storage Tank	Maintenance	10,000	No. 2 Diesel Fuel
Storage Tank	Maintenance	1,000	No. 2 Diesel Fuel (on road)

# 40 CFR PART 60, Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels:

The two leachate storage impoundment tanks with a total capacity of 2,000,000 (1,000,000 gallons each) gallons are not subject to the New Source Performance Standard, Subpart Kb because leachate does not meet the definition of volatile organic liquid.

# 40 CFR PART 60, Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants:

The portable overburden (soil/rock) screening operation and the material handling and storage activities at this source are not subject to the New Source Performance Standard, Subpart OOO because these activities do not utilize crushers/grinders and are not considered as a nonmetallic mineral processing plant, as defined by §60.671.

# 4. Approval and Promulgation of State Plans for Designated Facilities and Pollutants

40 CFR PART 62, Subpart OOO - Federal 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:

The municipal solid waste landfill is subject to the requirements of this subpart because the landfill commenced construction before July 17, 2014, and has not been modified or reconstructed. The requirements have been incorporated into the operating permit. The following sections of Subpart OOO do not apply:

- **40 CFR §62.16716** is not included because the facility chose to comply with the operational standards in §63.1958, instead of the operational standards in §62.16716.
- **40 CFR §62.16720** is not included because the facility chose to comply with the compliance provision of 40 CFR § 63.1960.
- 40 CFR §62.16722 is not included because the facility chose to comply with the monitoring provision of 63.1961.
- 40 CFR §62.16724(I) is not applicable to the facility because it deals with a facility that employs leachate recirculation or added liquids based on a Research, Development, and Demonstration permit.
- **40 CFR §62.16726(c)** is not applicable because it references 40 CFR §62.16722 (monitoring), and the facility decided to comply with the monitoring provision of §63.1961 as referenced above.
- 40 CFR §62.16726(j) is not included because it does not apply to the facility. It requires the facility to keep records of leachate recirculation or added liquids.
- 40 CFR §62.16726(h) is not included because it references §62.16722, which is not applicable to the facility.

#### 5. NESHAP and MACT Standards:

<u>40 CFR PART 63, Subpart AAAA - Standards of Hazardous Air Pollutants for Municipal Solid Waste Landfills:</u>

Pursuant to §63.1930(b), all landfills described in §63.1935 must meet the requirements of Subpart AAAA. The requirements of this subpart always apply, including during periods of SSM, and the SSM requirements of the General Provisions of this part do not apply. The requirements have been incorporated into the operating permit. The following sections of Subpart AAAA do not apply:

- 40 CFR §63.1955(b) is not included because it does not apply to the facility. It deals with facilities that own or operate bioreactor.
- 40 CFR §63.1964(a) is not included because it does not apply to the facility. It requires facilities to develop and implement SSM plan before September 28, 2021, and the plan is no longer applicable after September 28, 2021.
- 40 CFR §63.1982 is not applicable to the facility because the facility does not operate a bioreactor or liquid addition.

#### **6.** Emission Inventory:

This facility is required to provide annual Emission Inventory reports per §2108.01.e of Article XXI because this facility has the potential to emit more than 25 tpy of all the criteria pollutants.

#### 7. Risk Management Plan; CAA Section 112(r):

The facility is not required to have a risk management plan at this time because none of the regulated chemicals exceed the thresholds in the regulation.

# 8. Greenhouse Gas Reporting (40 CFR Part 98):

The facility is subject to this mandatory greenhouse gas (GHG) reporting requirements because it has the potential to emits 25,000 metric tons or more of carbon dioxide equivalent (CO<sub>2</sub>e). Pursuant to 40 CFR  $\S98.2.a.2$ , the facility shall submit reports to the US EPA in accordance with 40 CFR Part 98.

# 9. Compliance Assurance Monitoring (40 CFR Part 64):

The Compliance Assurance Monitoring (CAM) rule found in 40 CFR 64 is not applicable to the facility pursuant to §64.2(b)(1), which states "emission limitations or standards proposed by the administrator after November 15, 1990, pursuant to Sections 111 or 112 of the Act". Section 112, NESHAP (MACT) Subpart AAAA, promulgated on January 16, 2003, is applicable to the facility. In addition, the landfill has uncontrolled potential to emit (PTE) of regulated pollutants less than 100 tons per year.

### 10. Environmental Justice:

North Fayette Township, PA is not considered an environmental justice (EJ) area, defined by the Pennsylvania DEP as "any census tract where 20 percent or more individuals live at or below the federal poverty line, and/or 30 percent or more of the population identifies as a non-white minority, based on data from the U.S. Census Bureau and the federal guidelines for poverty", however this facility was still evaluated for EJ concerns. Because this facility is an existing source, alternative site location is not possible. The operating permit contains all testing, monitoring, recordkeeping, and reporting requirements (as required under §70.6(a)(3)).

# 11. Compliance History

The following Table shows the facility compliance status:

Table 11

Table 11							
Area Evaluated During Inspection	Date of Inspection	In Compliance	Non Compliance	Comment			
<ul> <li>Operating Permit</li> <li>Source Testing</li> <li>Records/Reports</li> <li>Operation/Maintenance</li> <li>Information Gathering</li> </ul>	August 29, 2023 On site full Compliance Review	Yes	No	Imperial Landfill was deemed to be in compliance with the Title V Operating Permit #0068, Article XXI and all applicable federal regulations			
<ul> <li>Operating Permit</li> <li>Source Testing</li> <li>Records/Reports</li> <li>Operation/Maintenance</li> <li>Information Gathering</li> </ul>	May 11, 2021 On site full Compliance Review	Yes	No	Imperial Landfill was deemed to be in compliance with the Title V Operating Permit #0068, Article XXI and all applicable federal regulations.			
<ul> <li>Operating Permit</li> <li>Source Testing</li> <li>Records/Reports</li> <li>Operation/Maintenance</li> <li>Information Gathering</li> </ul>	September 13, 2019 On site full Compliance Review	Yes	No	Imperial Landfill was deemed to be in compliance with the Title V Operating Permit #0068, Article XXI and all applicable federal regulations.			

# **EMISSIONS SUMMARY:**

**Emissions Summary for Imperial Landfill** 

Pollutant	Total (tpy)*
Particulate Matter	121.54
Particulate Matter <10 μm (PM <sub>10</sub> )	45.12
Nitrogen Oxides (NO <sub>x</sub> )	67.36
Sulfur Oxides (SO <sub>X</sub> )	15.21
Carbon Monoxide (CO)	164.90
Volatile Organic Compounds (VOC)	26.03
Non-Methane Organic Compound (NMOC)	61.27
Single HAP	6.37
Hazardous Air Pollutants (HAP)	19.01
Greenhouse Gases (CO <sub>2</sub> e)	170,832.51

<sup>\*</sup>A year is defined as any consecutive twelve-month period.

# **RECOMMENDATION:**

All applicable Federal, State, and County regulations have been addressed in the permit application. The Renewal Title V Operating Permit for Imperial Landfill should be approved with the emission limitations, terms and conditions in Permit No. 0068-OP25.