### SCS ENGINEERS

October 3, 2017 File No. 02217001.00

Mr. Mark Wejkszner Air Program Manager Pennsylvania Department of Environmental Protection Northeast Region 2 Public Square Wilkes-Barre, PA 18701-1906



Subject:

Title V Permit Renewal Application

IESI PA Bethlehem Landfill (Title V Permit No. 48-00027)

Dear Mr. Wejkszner:

On behalf of IESI PA Bethlehem Landfill Corporation, SCS Engineers (SCS) has prepared the enclosed Title V permit renewal application for the renewal of the landfill's Title V operating permit. A total of three (3) completed application packages are included along with the required application fee of \$750.00 and delivery confirmation of the required municipal notifications.

Please do not hesitate to contact either of the undersigned at (703) 471-6150 if there are any questions regarding this submittal.

Sincerely,

Ryan Christman, M.S. Staff Professional

Ryan Christman

SCS ENGINEERS

Joshua G. Roth, P.E. Project Director

SCS ENGINEERS

REC/JGR

cc: Nick Rogers/Don Hallock, IESI PA Bethlehem Landfill

Lana Brown/Kurt Shaner, Waste Connections, Inc.

**Enclosures** 

ROUTING [9 Council Manager Or Y. ☐ Asst. Mgr. Zoning ☐ Finance ☐ Police ☐ P. Works □ P/C □ P&R □ EAC Engineer Solicitor ☐ Planner [4 Landfill ☐ EMC

12 Other Web

#### DOCUMENT HAS A COLORED BACKGROUND. SECURITY FEATURES LISTED ON BACK.



WASTE CONNECTIONS, INC 3 WATERWAY SQUARE PLACE, SUITE 110 THE WOODLANDS, TX 77380 8324422200

Bank of America

52-153/112 ME

\*\*\*PROTECTED BY POSITIVE PAY\*\*\*

DATE

9/26/2017

CHECK NUMBER

CHK2412131

PAY

Seven hundred fifty and 00 / 100 Dollars Only \*

TO THE ORDER

COMMONWEALTH OF PENNSYLVANIA

OF

AIR QUALITY PROGRAM 22 PUBLIC SQUARE

WILKES BARRE, PA 18701-1915

AMOUNT \$750.00

**VOID AFTER 180 DAYS** 

Authorized Signature

## 2412131# #D11201539# 2220013774#

## SCS ENGINEERS















# IESI PA Bethlehem Landfill Title V Operating Permit Renewal Application

Prepared for:
IESI PA Bethlehem Landfill

2335 Applebutter Road Bethlehem, PA 18015-6004 (610) 317-3200

Prepared by:

#### SCS ENGINEERS

11260 Roger Bacon Drive, Suite 300 Reston, VA 20190 (703) 471-6150

> October 2017 File No. 02217001.00

Offices Nationwide www.scsengineers.com

# IESI PA Bethlehem Landfill Lower Saucon Township Northampton County, Pennsylvania Title V Operating Permit Renewal Application

Prepared for:

IESI PA Bethlehem Landfill 2335 Applebutter Road Bethlehem, PA 18015-6004

Prepared by:

SCS ENGINEERS

11260 Roger Bacon Drive, Suite 300 Reston, VA 20190 (703) 471-6150

> October 2017 File No. 02217001.00

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#### 1.0 INTRODUCTION

This package addresses the requirements of the Pennsylvania Department of Environmental Protection (PADEP) Air Permitting Program, Title 25 of the Pennsylvania Code, Chapter 127, Subchapter F, as they apply to the application for the renewal of the Title V air operating permit for the IESI PA Bethlehem Landfill (the landfill) located in Bethlehem, Pennsylvania.

The landfill is an active municipal solid waste (MSW) landfill which operates a gas collection and control system (GCCS) in accordance with its current Title V operating permit (No. 48-00027). The GCCS includes an enclosed landfill gas (LFG) flare which provides LFG control in accordance with the Title V operating permit. The landfill also directs a portion of recovered LFG to a third-party landfill gas-to-energy (LFGE) facility. The LFGE facility is separately owned and operated by Bethlehem Renewable Energy, LLC ("BRE") and operates in accordance with separate permit(s) issued to BRE.

The landfill and GCCS are currently subject to the EPA's Standards of Performance for Municipal Solid Waste Landfills, promulgated at 40 CFR Part 60 Subpart WWW (i.e., NSPS Subpart WWW). In addition, the landfill and GCCS are currently subject to the EPA's National Emission Standards for Hazardous Air Pollutants for Municipal Solid Waste Landfill, promulgated at 40 CFR Part 63 Subpart AAAA (i.e., NESHAP Subpart AAAA).

The Landfill's current Title V operating permit was issued on April 12, 2013 and will expire on April 12, 2018. This application seeks to renew the Title V operating permit.

#### 2.0 REQUESTED PERMIT MODIFICATIONS

The following is a summary of Title V operating permit modifications requested to be implemented in conjunction with the permit renewal process:

- On September 8, 2017, the PADEP issued Plan Approval 48-00027A for the Southeastern Realignment of the landfill. This plan approval is for the increase in landfill capacity of approximately 3,669,600 cubic yards. This application seeks to incorporate applicable requirements of this Plan Approval into the Title V operating permit.
- On August 29, 2016, the EPA published new Standards of Performance for Municipal Solid Waste Landfills. These new standards are promulgated at 40 CFR Part 60 Subpart XXX (i.e., NSPS Subpart XXX). NSPS Subpart XXX applies to MSW landfills that commence construction, reconstruction, or modification after July 17, 2014.
  - Upon commencement of construction of the landfill expansion, the landfill will become subject to applicable requirements of NSPS Subpart XXX. This application seeks to incorporate into the Title V operating permit new requirements applicable to the landfill under NSPS Subpart XXX upon commencement of construction of the landfill expansion per Plan Approval 48-00027A.
- The Portable Crushing Operation (Source ID 755884) no longer operates. As such, this application seeks to remove this emission unit, along with its associated engine (Source 008) and water spray control device (Source C005), from the Title V operating permit.

### 3.0 INSIGNIFICANT SOURCES

The Landfill operates several insignificant air emission sources which have been determined by the PADEP to be of minor significance under 25 Pa. Code, Chapter 127, Section 127.14(a)(8). Several of these are listed in Section H of the current operating permit. The current inventory of insignificant air emission sources is summarized in **Table 1**.

Table 1 - Inventory of Insignificant Emission Sources

Group	Unit
ISO01	Two (2) Backup Emergency Generators <sup>1</sup> , < 2.5 MMBtu/hr
15002	Maintenance Shop Furnace/Space Heater <sup>1</sup> , < 2.5 MMBtu/hr
18003	Two (2) Odor Control Mister Systems (including pumps) <sup>2</sup>
IS004	Portable Light Plant <sup>3</sup>
IS00 <i>5</i>	Portable Air Compressor Generator <sup>3</sup>
IS006	6.5 kW Portable Generator <sup>3</sup>

#### Notes:

- 1) Currently listed in Section H of the Title V operating permit. The scale heaters currently listed in the permit's Insignificant Source Inventory have been removed.
- 2) Exempted per PADEP-approved Request for Determination (RFD).
- 3) Insignificant source to add to Section H.

### 4.0 PERMIT RENEWAL APPLICATION FORMS



# COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF AIR QUALITY

FOR OFFICIAL USE ONLY

### TITLE V OPERATING PERMIT APPLICATION

Section 1 - General Information					
1.1 Application Type  Type of permit for which application is made: (Check one)  ☐ Initial ☐ Renewal Operating Permit No. 48-00027 ☐ Application Revision - provide date of original Title V Application or OP No.:					
1.2 Plant Information	<u> </u>				
Federal Tax ID/Plant Code: 22-3575227- Firm Name:	IESI PA Bet	hlehem Landfill Corp.			
Plant Name:	IESI PA Bet	hlehem Landfill			
NAICS Code: 562212 SIC Code: 4953					
Description of NAICS Code: Solid Waste Landfill, Non-hazardous					
Description of SIC Code: Refuse Systems					
County: Northampton	Municipality:	Lower Saucon Township			
Latitude: 40°37'18.12"N	Longitude:	75°18'32.85"W			
Horizontal Reference Datum:  North American Datum of 1983 Horizontal Collection Method:		Reference Point: Plant Entrance			
1.3 Contact Information					
Name: Don Hallock	Title: Distric	t General Manager			
Address: 2335 Applebutter Road, Bethlehem, PA 18015-6	004				
Telephone Number: 610-317-3200		***************************************			
Email Address: donh@wasteconnections.com					
1.4 Certification of Truth, Accuracy and Completeness					
Note: This certification must be signed by a responsible official. Applications without a signed certification will be returned as incomplete.					
I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate, and complete.					
(Signed) anal-ace last	Date:	10/2/2017			
Name (Typed): Donald Hallock	Title:	District General Manager			

Section 2 - Applicable	Requirements for the Entire Site	
	cable requirements pertaining to the entire sit liance Worksheet (Addendum 1) must be com	
For renewals, only list site Title V Operating Permit. right.	e level requirements not included in the curr If there are no changes, check the box to	ent 🖾 No changes from current Title V the Operating Permit.
Citation No.	Citation Limitation	Limitation Used
100 to 1		

#### Section 3 - Site Inventory

Give a complete list of all air pollution sources, control equipment, emission points, and fuel material locations within this site.

For renewals, only list sources not included in current Title V Operating Permit or sources which are now subject to Compliance Assurance Monitoring (CAM) requirements of 40 CFR Part 64. If preprinted information is provided, correct and/or add any new sources as necessary. Note: One (1) of the following sections (5, 6 or 7) of the application must be completed for each new source listed here.

Unit ID	Company Designation	Unit Type	CAM
	Current Emission Unit Inv	ventory	
001	Landfill Operations	Process	N/A
002	Landfill Surface and Roadway	Process	N/A
004	Leachate Storage	Process	N/A
C002	Landfill Gas Collection/Replacement Flare	Control Device	N/A
<u> </u>	Various Insignificant Sources <sup>1</sup>	Various Insignificant Sources	N/A
	New Emission Units to Incorpora	ate into Permit	
001	Southeastern Realignment Increase in Landfill Capacity Request to incorporate applicable requirements of Plan Approval 48-00027A (issued 9/8/17) into operating permit during the renewal process	Process	N/A
	Emission Units to be Removed	from Permit	
800	CAT C9D1 engine (GP9-48-001) <sup>2</sup>	Combustion Unit	
755884	Portable Crushing Operations <sup>2</sup>	Process	
C005	Water Sprays <sup>2</sup>	Control Device	

#### Notes:

<sup>1.</sup> See Introduction for a summary of insignificant air emission sources at the facility.

<sup>2.</sup> The portable crushing operation, and associated engine and water sprays, no longer operates and can be removed from the operating permit during the renewal process.

Section 4 - Source Group (Optional)									
4.1	Source Gro	up Defi	nition						
	Define group group.	groups of source(s) that are subject to one or more applicable requirements that apply to all source(s) in the							
	For renewals, only list source groups not included in the current No changes from current Title V Title V Operating Permit. If there are no changes, check the box to Operating Permit. the right.								
1.1	Group No. Source ID (for source(s) in this group)								
4.2	4.2 Applicable Requirements for Source Groups  For renewals, only list group level requirements not included in the current Title V Operating Permit. If there are no changes, check the box to the right.								
	Describe and	d cite all	applicable requirements p	ertaining to all source groups.					
	1, 11, 1	thod of (	et alleg alle in the larger of the transplantation of the larger	Idendum 1) must be completed					
G	roup No.		Citation No.	Citation Limitation Control of MSW landfill NMO	Limitation Used				
	01	40 CF	R Part 60 Subpart XXX	emissions	' N/A				

Se	ction 5 - Comb	oustion Operational I	nventory – NOT APP	LICABLE	
For	renewals, revie		·		eded). any new combustion unit
5.1		f this application. rce Information			
J. 1	General Soul	ce monnation			
a.	Unit ID:		b. Company Design	ation:	
C.	Plan Approval o	or Operating Permit No.:			
d.	Manufacturer:		e. Model No.:		
f.	Source Descript	tion:			
g.	Rated Heat Inpu	ut/Thruput:	h.	Installation Date:	
i.	Exhaust Temperature	Units	j. Exhaust % Moisture	k. Exhaust Flow Volume:	SCFM
Yes (Ad 5.3	Emi Pote dendum 3 must  Exhaust Syst	issions unit uses a control ential precontrol emission be completed if both box tem Components are exhaust components	ns of applicable pollutan	•	it of major source amount.
	From Unit	Unit Description	To Unit	Unit Description	Percent Flow
	T TOTAL OTTAL	Onit Description	TO Office 1	Ont Description	refcent flow
	***************************************				
				***************************************	

Fuel/Material	Associa	ted SCC	Max Through	hput Rate	Firing Sequence
Maximum Fuel Physica			e instructions.		
			e instructions.	% Ash	BTU Content (Un
If taking limitations on F	uel Physical Ch	naracteristics, see		% Ash	BTU Content (Un
If taking limitations on F	uel Physical Ch	naracteristics, see		% Ash	BTU Content (Un
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If taking limitations on F	uel Physical Ch	naracteristics, see		% Ash	BTU Content (Un
If taking limitations on F	uel Physical Ch	naracteristics, see		% Ash	BTU Content (Un

Complete this section if you are requesting a limitation on operational hours and/or a permit limitation on the throughput rate equal to or lower than that stated in Section 5.1 of the application.

Maximum amount of hours of source operation per year:

Fuel/SCC	Hours/Day	Days/Week	Days/Year	Hours/Year	Max Thruput	Units/Time

5.7	Source Applic	able Requirements		
	Describe and o	ite all applicable requirement	ts pertaining to this source.	
	Note: A Metho	d of Compliance Worksheet	(Addendum 1) must be completed for	each requirement listed.
	For renewals, of current Title V box to the right	only list source level requiren Operating Permit. If there ar	nents not included in the No e no changes, check the Op	changes from current Title V perating Permit.
	Fuel/SCC	Citation No.	Citation Limitation	Limitation Used
,				
····•				
		***************************************		
		***************************************		
		***************************************		

Se	ction 6 - Incinera	tor Operational Inve	entory – NOT APPL	CABLE	
(Co	mplete this section	for each incinerator at	the site. Duplicate this	section as needed).	
	renewals, review a ction 3 of this applic		ted information and ad	d additional sections for any	y new incinerator listed in
6.1	General Source	Information			
a.	Unit ID:		b. Company Desi	gnation:	
C.	Plan Approval or C	Operating Permit No.:			
d.	Manufacturer:		e. Model No.:	-	
f.	Source Description	າ:			
g.	Rated Heat Input/⊓	Γhruput:		. Installation Date:	
i.	Exhaust Temperature	Units	j. Exhaust % Moisture	k. Exhaust Flow Volume:	SCFM
1.	Incin. Capacity:	Lbs/Hr	m. Primary Bur	ner Heat Input:	Units
n,	Exhaust % CO <sub>2</sub> : _		o. Secondary I	Burner Heat Input:	Units
p.	Incinerator Class:				
q.	Waste Type:		r	. Waste BTU/Lb:	
6.2 Yes	s No 	ions unit uses a control tial precontrol emissio	ns of applicable pollu	pliance with emissions limit ant are at least 100 perc	
6.3	•	n Components exhaust components a	re configured:		
	From Unit	Unit Description	To Unit	Unit Description	Percent Flow

3.4 Source	Classification Co	de (SCC) Lis	ting for Stan	đard Ope	eration				
Fuel / N	laterial :	Associate	ed SCC	Max	Throughput Rat	e i	Firing Sequence		
.5 Maximu	m Fuel Physical (	Characteristic	cs						
If taking	imitations on Fuel	Physical Cha	racteristics, s	ee instrud	ctions.				
	n amount of hours	_							
SCC/Fuel	Burned	FML	% Sulfu	<u> </u>	% Ash		вти с	Content (Units	
					***************************************				
ML = Fuel Mat	erial Location								
.6 Limitatio	ons on Source Op	eration							
	this section if ye		stina a limita	tion on c	nerational hours	and/or a	nermit !	imitation on t	
throughp	ut rate equal to or	lower than the	at stated in S	ection 6.3	of this application	n.	ponnic	mmadon on t	
Maximun	n amount of hours	of source ope	eration per ye	ar:				····	
Fuel/Waste	Hours/Day	Days/We	ek Days	/Year	Hours/Year	Max Ti	ıruput	Units/Time	

6.7	Source Applic	able Requirements				
	Describe and c	ite all applicable requirement	s pertaining to this source.			
	Note: A Metho	d of Compliance Worksheet	(Addendum 1) must be completed for eac	h requirement listed.		
	For renewals, of current Title V (box to the right)	only list source level requiren Operating Permit. If there are	nents not included in the No c e no changes, check the Opera	changes from current Title V rating Permit.		
	Fuel/Waste	Citation No.	Citation Limitation	Limitation Used		

Section 7 - Process	Section 7 - Process Operational Inventory									
(Complete this section	for each process at this s	site. Duplicate t	his sectior	as needed).						
For renewals, review Section 3 of this applic	and correct any pre-printe cation.	ed information a	and add a	dditional section	s for any	new process listed in				
7.1 General Source	Information									
a. Unit ID: 001		b. Company	Designatio	on: Landfill Op	erations					
c. Plan Approval or (	Operating Permit No.:	48-00027	48-00027							
d. Manufacturer: N	N/A	e. Model	No.:	N/A						
f. Source Description: Municipal solid waste landfill										
g. Rated Heat Input/Thruput: N/A h. Installation Date: Operations began circa 1954										
i. Exhaust Temperature N//	A Units N/A	j. Exhaust % Moisture	N/A	k. Exhaust Flow Volume:	Varies	SCFM				
7.2 CAM Information	on									
	ions unit uses a control de tial precontrol emissions nt.		•							
(Addendum 3 must be	completed if both are che	ecked "Yes")								
7.3 Exhaust System Explain how the	n Components exhaust components are	configured:								
From Unit	Unit Description	To Unit	t	Unit Descrip	tion	Percent Flow				
001	Landfill operations	C002		Enclosed ground	d flare	Varies*				
001	Landfill operations	Z002		Fugitive emissio	ns	Varies*				
						:				

<sup>\*</sup> Captured landfill gas is routed to the enclosed ground flare (C002) as well as to a third-party landfill-gas-to-energy (LFGE) facility which is owned and operated by Bethlehem Renewable Energy (BRE) in accordance with a separate permit(s) issued to BRE. The captured gas flow rate sent to the landfill's enclosed ground flare varies. Overall gas system collection is in accordance with applicable permit requirements (i.e., 80% for the Phase IV landfill area and 75% for all other landfill areas).

Fuel/Material	Associated SCC	Max Throughput Rate	Firing Sequence
4	N/A	N/A	N/A

If taking limitations on Fuel Physical Characteristics, see instructions.

SCC/Fuel Burned	FML	% Sulfur	% Ash	BTU Content (Units)
N/A				

<sup>\*</sup>FML = Fuel Material Location

#### 7.6 **Limitations on Source Operation**

Complete this section if you are requesting a limitation on operational hours and/or a permit limitation on the throughput rate equal to or lower than that stated in Section 7.3 of this application.

Maximum amount of hours of source operation per year: N/A

Fuel	Hours/Day	Days/Week	Days/Year	Hours/Year	Max Thruput	Units/Time
N/A						
- mm						
						***************************************

7.7	Source A	pplicable Require	ments				
	Describe a	and cite all applicat	ole requirement	ts pertaining to t	his source.		
	Note: A M	lethod of Compliar	ce Worksheet	(Addendum 1) n	nust be comple	eted for eac	ch requirement listed.
		als, only list source le V Operating Per right.					changes from current Title V ating Permit.
F	uel/Produc	t Citati	on No.	Citat	ion Limitation	l' <sub>a</sub> s, t i s	Limitation Used
						···	
	·					··-	
			-				
7.8	D 8f-4-						
7.0	Raw Mate						
	List all of regulate e		used in this p	process to the $\epsilon$	extent that this	s informatio	on is needed to determine or
	Municipal	solid waste					
				,			
7.9	Processir	a Stens	***				
			ation is needed	l to dotarmina a	rogulato omia	oiona linta	all of the processing steps and
		als for each step u				5510115, 1151 6	all of the processing steps and
	Step		Description	Taka Taka Taka		Raw	Materials
N/A		<u> </u>					
		MARKET					
7.10	Request f	or Confidentiality					
	Do you red	quest that the infor	mation on this r	nage he conside	red confidentia	al?	
				34g3 53 331.5143	rod doringonia	<b></b>	
	******	Yes ⊠ ude a justification f	No or confidentialit	y that moote the	requirement :	of 25 Pa C	ode\$ 127 411(d)
	n yes, men	auo a justinuation l	or commentall	y mai meets me	requirement (	orzo Pa, C	oueg 121.411(a).
			<del> </del>				
					***		

Sec	ction 7 - Proces	s Operational Inventor	ry						
(Co	mplete this section	for each process at this	site. Duplicate	this section	on as needed).		***		
	renewals, review ction 3 of this applic	and correct any pre-printe cation.	ed information	and add a	additional section	s for any	new process listed in		
7.1	General Source	Information							
a.	Unit ID: 002		b. Company	Designat	ion: Landfill Su	face and	Roadway		
C.	Plan Approval or (	Operating Permit No.:	48-00027						
d.	Manufacturer:	N/A	e. Mode	l No.:	N/A				
f.	f. Source Description: Fugitive particulate matter from landfill surfaces and roadways								
g.	Rated Heat Input/	Thruput: N/A		h. l	nstallation Date:	Operation 1954	ons began circa		
i.	Exhaust Temperature N/	A Units N/A	j. Exhaust % Moisture	N/A	k. Exhaust Flow Volume:	N/A	SCFM		
Yes	⊠ Emiss ⊠ Poten amou  dendum 3 must be  Exhaust Systei	completed if both are che	of applicable	-					
	From Unit	Unit Description	To Uni	it 1	Unit Descrip	otion	Percent Flow		
002		Landfill surface and roadways	Z002		Fugitive PM		100		
							······		
•									
_									
					MANUAL AND FOR A STATE OF THE S				

Fuei/M	laterial	Asso	ciated SCC	Max	Throughput Rat	e :	Firing	Sequence	
I/A									
		•••							
.5 Maximu	ım Fuel Physical C	`haractor	rietice						
	-								
If taking	limitations on Fuel	Physical	Characteristi	cs, see instru	ctions.				
SCC/Fue	l Burned	FML % S		ulfur	% Ash		BTU Content (Unit		
I/A									
	iterial Location								
.6 Limitati	ons on Source Op	eration							
Complet	te this section if ye	nu are re	auestina a li	mitation on o	nerational hours	and/or a i	narmit li	mitation on	
001110101	out rate equal to or	lower tha	n that stated	in Section 7.3	of this application	n.	pomin i	madon on	
through		-£	operation no	NI/A					
	m amount of hours	or source	operation pe	er year: <u>IN/A</u>					
Maximu		1	· · · · · · · · · · · · · · · · · · ·			May The	runut	Units/Tim	
	Hours/Day	1	· · · · · · · · · · · · · · · · · · ·	Days/Year	Hours/Year	Max Thr	ruput	Units/Tim	
Maximu		1	· · · · · · · · · · · · · · · · · · ·			Max Thr	ruput	Units/Tim	
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Maximu		1	· · · · · · · · · · · · · · · · · · ·			Max Thr	ruput	Units/Tim	

7.7	Source Applic	able Requirements							
	Describe and c	ite all applicable requirements	s pertaining to tl	nis source.					
	Note: A Metho	d of Compliance Worksheet (	Addendum 1) m	nust be completed	for each requirem	ent listed.			
	For renewals, only list source level requirements not included in the current Title V Operating Permit. If there are no changes, check the box to the right.								
F	rel/Product	Citation No.	Citat	ion Limitation	Lin	nitation Used			
-									
					i				
7.8	Raw Materials								
	regulate emissi	raw materials used in this poons.	rocess to the e	extent that this info	ormation is need	ed to determine or			
-	N/A								
-									
7.9		eps nat this information is needed or each step utilized to comple			s, list all of the pr	ocessing steps and			
N. T.	Step	Description	* * * :		Raw Materials				
N/A									
· · ·									
7.10	Request for C	onfidentiality							
	Do you request	that the information on this p	age be conside	red confidential?					
	☐ Ye	s 🛛 No							
	If yes, include a	a justification for confidentiality	y that meets the	requirement of 25	Pa. Code§ 127.4	111(d).			
-									
-									

Sec	tion 7 - Proces	s Operational Invento	ry						
(Coi	mplete this section	n for each process at this	site	. Duplicate	this section a	s needed).			
	renewals, review tion 3 of this appli	and correct any pre-print cation.	ed	information :	and add addi	tional section	s for any	new process listed in	
7.1	General Source	e Information							
a.	Unit ID: 004		b.	Company	Designation:	Leachate s	torage		
C.	Plan Approval or	Operating Permit No.:		48-00027	027				
d.	Manufacturer:	N/A		e. Mode	I No.:	N/A		www.mamm.gryunativista.co.	
f.	Source Descriptio	n: 390,000 gal above-ç storage.	grou	ınd storage	tank and 1,10	0,000 gal lag	oon for e	mergency leachate	
g.	Rated Heat Input/	Thruput: N/A			h. Insta	llation Date:	N/A		
	Exhaust Temperature N/	A Units N/A		Exhaust % Moisture	N/A	c. Exhaust Flow Volume:	N/A	SCFM	
(Add	Poten amou dendum 3 must be Exhaust System	e completed if both are che	of eck	applicable	•				
		-	COI	-				·	
004	From Unit	Unit Description	-7/	To Uni		Unit Descrip		Percent Flow	
		Leachate Storage		004	ru	gitive VOC/H/	4PS	100	

Fuel/M	aterial	Associated	scc	Max Th	roughput Rat	e Fi	ring Sequence	
I/A								
***************************************								
.5 Maximu	m Fuel Physical C	haracteristics						
If taking	limitations on Fuel I	Physical Charac	teristics, see	e instructio	ns.			
SCC/Fue		FML % Sulfur		<u> </u>	% Ash	D.	BTU Content (Units)	
/A	Dameu	1 141-	/a Sullai		/0 A311		10 confent (oil	
/A								
			,					
ML = Fuel Ma	terial Location	•				•		
.6 Limitatio	ons on Source Op	eration						
			1					
throught	e this section if your rate equal to or l	ou are requestir ower than that s	ng a ilmitatio stated in Sect	on on ope tion 7.3 of	rational nours this applicatio	and/or a per n.	mit limitation or	
٥.	m amount of hours							
iviaxiiriui	in amount of nours	oi source opera	uon per year.	. 11//7				
Fuel	Hours/Day	Days/Week	Days/Y	/ear	Hours/Year	Max Thrup	out Units/Ti	

7.7	Source A	pplica	able Requi	irements							
	Describe a	and ci	te all applic	cable requirer	ments perta	aining to t	his sour	ce.			
	Note: A M	/lethod	d of Compli	iance Worksh	neet (Adder	ndum 1) n	nust be	completed	for eac	h requirement lis	ited.
		tle V C	Operating P	rce level requermit. If ther						hanges from cเ ating Permit.	ırrent Title V
F	uel/Produc	:t	Cit	ation No.	18.	Citat	ion Lim	itation		Limitatio	n Used
,											
7.8	Raw Mate	erials									
				als used in th	his process	s to the $\epsilon$	extent th	at this info	ormatio	n is needed to	determine or
	regulate emissions.										
	Leachate										
•											
-											
7.9	Processin	ng Ste	∍ps								
				rmation is nee p utilized to co					s, list a	ill of the processi	ng steps and
	Step		<u></u>	Description	on :,	y na sama na			Raw	Materials	Fy
N/A											
								·			
7.10	Request f	for Cc	onfidential	ity							
	Do you red	quest	that the inf	formation on t	this page b	e conside	red con	fidential?			
		Yes	<b>L</b>	⊠ No							
		_			ntiality that	meets the	reauire	ment of 25	Pa. Co	ode§ 127.411(d).	
	, , , , , , , , , , , , , , , , , , , ,		,		,		1				
•											
-											
-											

#### Section 8 - Control Device Information (duplicate this section as needed)

For renewals, review and correct any pre-printed information and add additional sections for any new control device listed in Section 3 of this application.

#### 8.1 General Control Device Information

a.	Unit ID: C002	b.	Company Designation:	Landfill Gas Collection/Replacement Flare
c.	Used by Source(s): 001			
d.	Type: Enclosed ground flare			
e.	Pressure Drop in H <sub>2</sub> 0: N/A	, . , . ,	f. Capture Efficiency:	Varies*
g.	Scrubber Flow Rate (GPM): N/A			
h.	Manufacturer: John Zink		i. Model No.: E	Enclosed Ground Flare
j.	Installation Date: December 2003			ı

#### 8.2 Control Device Efficiencies for this Control Device:

Pollutant Name	CAS No.	Estimate Control Efficiency	Basis for Efficiency Estimate
Non-methane organic compounds	N/A	98% or 20 ppmv	Manufacturer/Source Testing
Volatile organic compounds	N/A	98% or 20 ppmv	Manufacturer/Source Testing
Hazardous air pollutants	N/A	98%	Manufacturer/Source Testing

<sup>\*</sup> Captured landfill gas is routed to the enclosed ground flare (C002) as well as to a third-party landfill-gas-to-energy (LFGE) facility which is owned and operated by Bethlehem Renewable Energy (BRE) in accordance with a separate permit(s) issued to BRE. The captured gas flow rate sent to the landfill's enclosed ground flare varies. Overall gas system collection is in accordance with applicable permit requirements (i.e., 80% for the Phase IV landfill area and 75% for all other landfill areas).

#### Section 9 - Stack/Flue Information (duplicate this section as needed) For renewals, review and correct any pre-printed information and add additional sections for any new stack/flue listed in Section 3 of this application. 9.1 General Stack/Vent Information a. Unit ID: S001 b. Company Designation: Enclosed flare stack c. Discharge Type: Vertical unobstructed opening d. Diameter (ft): 12 Height (ft): 50 Base Elevation (ft): 455 (approx.) e. Exhaust Temperature: Min. Exhaust % Moisture: N/A Exhaust Velocity: 1,500°F (typ.) f. Exhaust Volume: Varies ACFM Exhaust Volume: Varies SCFM g. Distance to Nearest Property Line (ft): 200 ft (approx.) ⊠ No i. Used by Sources: 001 40°37'22.09" N j. Latitude: Longitude: 75°18'22.18" W Horizontal Horizontal Reference Collection Datum: Method: Reference Point: Center of flare skid b. Company Designation: a. Unit ID: c. Discharge Type: d. Diameter (ft): Height (ft): Base Elevation (ft): Exhaust Velocity <<V2>>: e. Exhaust Temperature: Exhaust % Moisture: f. Exhaust Volume: ACFM Exhaust Volume: SCFM g. Distance to Nearest Property Line (ft): Yes h. Weather Cap?: ☐ No i. Used by Sources: j. Latitude: Longitude: Horizontal Horizontal Reference Collection Datum: Method: Reference Point:

## Section 10 - Fuel Material Location (FML) Information (Optional) – NOT APPLICABLE For renewals, review and correct any pre-printed information and add additional sections for any new FML listed in Section 3 of this application. 10.1 Fuel Material Location Information b. Name: \_\_\_\_\_ a. FML ID No.: c. Capacity: Units: d. Fuel: e. Maximum Fuel Characteristics: If fuel is coal, what is the moisture content? % Sulfur: \_\_\_\_\_ BTU Content: \_\_\_\_ Units: \_\_\_\_ % Ash f. Used by Source: b. Name: a. FML ID No.: Units: d. Fuel: c. Capacity: e. Maximum Fuel Characteristics: If fuel is coal, what is the moisture content? % Sulfur: BTU Content: Units: f. Used by Source: a. FML ID No.: c. Capacity: \_\_\_\_ Units: \_\_\_ d. Fuel: \_\_\_\_ e. Maximum Fuel Characteristics: If fuel is coal, what is the moisture content? % Ash \_\_\_\_\_ % Sulfur: \_\_\_\_ BTU Content: \_\_\_\_ Units: \_\_\_\_ f. Used by Source:

Section	on 11 - Compliance Plan for the Facility			
			Yes	No
11.1	Will your facility be in compliance with all applicable require time of permit issuance and continue to comply with these during the permit duration?	ements at the requirements		
11.2	Will your facility be in compliance with all applicable presently scheduled to take effect during the term of the per		$\boxtimes$	
11.3	Will these requirements be met by the regulatory required d			
	If you checked "No" in Part 11.1, 11.2 or 11.3, answer the fo	ollowing questic	ons:	
11.4	Identify applicable requirement(s) for which compliance is no	ot or will not be	achieved:	
	Source ID No.	garage and the second	Citation No.	
				:
11.4.1.	. Briefly describe how compliance with this/these applicable r	equirement(s) \	will be achieved:	
<u> </u>				
_	·			
_				

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2.3	Date		Action/Milestone	4.748 <sub>2.3</sub> 78.34.78
	Date	·	Action/initedio/ic	
Indicate the subr	nittal frequency for	the progress report (s):		
a		47.5		
Starting date for	the submittal of the	e progress report(s):		
•				

Section 1	12 – <i>F</i>	Alternative Ope	rating Scenario	o (optional)	) – NC	T APPLICAB	LE		
(Duplicate	this s	ection for each so	urce participated	in this altern	ative s	scenario.			
12.1 Gen	eral Ir	nformation		·					
a. Alter	mative	Operating Scena	rio Name or ID N	o.:					
b. Sour	rce ID	No.:		c.	Sour	ce Name:			
d. Sour	гсе Ту	pe (check one):	☐ Combusti	ion	☐ Ir	ncineratory	☐ Pro	Process	
e. Give	e. Give a brief description of this alternative scenario stating how it is different from the standard operation:							ration:	
12.2 Oper	ationa	l Flexibility Req	uest						
Check all t	that ap	ply.							
			stem component						
	If thi	s box is checked,	complete Section	ns 12.3 and 1	12.7				
							standard operation	٦.	
	If thi	s box is checked,	complete Section	ns 12.4 and/o	or 12.5	and 12.7			
						ocess SCC exis	ting in standard op	eration.	
	If thi	s box is checked,	complete Section	12.6 and 12	2.7				
12.3 Exha	ust Sy	/stem Compone	nts						
0			,	<i>c</i>					
Specify the	e com	olete exnaust sys	tem component co	onfiguration i	for this	s alternative ope	rating scenario.	T	
From Compon		From Component	To Component	To Compone	ont				
Туре		Number	Туре	Numbe		Percent Flow	Begin Date	End Date	
		:							

Alternative Product(s):

C.

12.4 Source Classific	ation C	ode (SCC)	Listi	ing for Alt	ernative	Operati	on			
Give a complete listir operating scenario.	g of all	fuels burr	ned, p	products pr	roduced	by a pro	ocess or w	aste inci	nerated for th	is alternative
Fuel		Associated SCC				Max Thro	ughout Ra	ate	Firing Sequence	
										,
12.5 Alternative Fuel	Physica	al Charact	eristi	cs						
Give a complete listing	of all fu	iels physic	al cha	aracteristics	s for this	alternati	ve operatin	g scenar	io.	
SCC/Fuel Burned	F	FML % Sulfur			•	% Ash			BTU Content (Units)	
										<del></del>
								······································		
						I		······································		
12.6 Alternative Proc	ess/Pro	duct Desc	riptio	on						
Give a complete listing					s for this	alternati	ve operatin	g scenar	io.	
Briefly describe applicable:					***********					scenario, if
b. Provide and brie	fly desc	ribe the pro	ocess	SCC asso	ciated v	vith this a	Iternative o	perating	scenario:	
Process SCC:			,	SCC Desc	ription:	1				

#### 12.7 Source Potential to Emit

Give Potential Emission estimate for all air pollutants emitted at this source for this operating scenario.

Pollutant or CAS Number	Fuel	Emission/Activity Allowable per Unit	Calc. Method	Max. Capacity	Total Hours	Emission in TPY
:						
	,					

Section 13 – Compliance Certification
13.1 Schedule for Compliance Certification Submission
a. Frequency of Submittal: Annual
b. Schedule specified in current Title V
Operating Permit or proposed starting date: March 1
13.2 Monitoring Compliance
Is the site identified in this application in compliance with all applicable requirements and compliance certification requirements:
⊠ Yes □ No
If "NO", describe which requirements are not being met:
13.3 Certification of Compliance
Subject to the penalties of Title 18 Pa. C.S. Section 4904 and 35 P.S. Section 4009(b)(2), I certify that I have the authority to submit this Permit Application on behalf of the applicant herein and that based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate and complete.  (Signed)  Date  /0/2/30/7  Name (Type) Donald Hallock
Title: District General Manager

### 5.0 ADDENDUMS



### **Addendum A: Source Applicable Requirements**

Describe and cite all applicable requirements pertaining to this source.

Note: A Method of Compliance Worksheet (Addendum 1) must be completed for each requirement listed.

Citation Number	Citation Limitation	Limitation Used
40 CFR Part 60 Subpart XXX	Control of MSW landfill NMOC emissions	N/A
4124		



## Addendum 1 Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT
Federal Tax Id: 23-1712936 Firm Name: IESI PA Bethlehem Landfill Corporation
Plant Code: 1 Plant Name: IESI PA Bethlehem Landfill
Applicable Requirement for: (please check only one box below)
The entire site
A group of sources, Group ID: 001
A single source, Unit ID:
Alternative Scenario, Scenario Name:
Citation #: 40 CFR 60 Subpart XXX
Compliance Method based upon: Applicable Requirement Gap Filling Requirement
Method of Compliance Type: (Check all that applies and complete all appropriate sections below)
Record Keeping Work Practice Standard
Section 2: Monitoring
1. Monitoring device type (stack test, CEM, etc.):  LFG Wellhead Monitoring; Monitoring of surface methane emissions
2. Monitoring device location: Individual gas collection wellheads per NSPS Subpart XXX; SEM monitoring in a serpentine pattern per NSPS Subpart XXX; Enclosed flare monitoring
Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:
Wellhead monitoring (monthly) for gauge pressure, nitrogen or oxygen, and temperature; SEM – quarterly for methane; flare temperature and flow
3. How will data be reported: In regular NSPS/MACT reports per 40 CFR 60 Subpart XXX (semi-annual).

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Addendum 1	

### Section 3: Testing

1.	Reference	Test	Method	Descript	ion:	None	(Initial	source	NMOC	testing	previously	conducted	at	existing
						enclos	ed gro	und flare	per Title	V opera	ating permit)			
	the control of the section is a second						····							

2. Reference Test Method Citation: N/

### Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Records will be recorded and maintained in accordance with 40 CFR §60.768.

### Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

In accordance with 40 CFR §60.767

1. Reporting start date: Per current facility reporting schedule

### Section 6: Work Practice Standard

### Describe any work practice standards:

The landfill and gas collection and control system shall be operated in accordance with 40 CFR §§60.760 – 60.769.



## ADDENDUM 3 CAM APPLICABILITY WORKSHEET FOR SOURCES

				FORMATION			
Federal Tax ID	22-3575227						
Firm Name	IESI PA Bethlehem Landfill Corp.						
Plant Code	Source I.D. 001						
1	Enclosed ground flare	AIRS Code No.		Pollutant VOC	, NMOC, HAPs		
Control Make	Varies	Control Model No.	Varies	Control Efficiency	Control device efficiency of 98% or 20 ppmv*		
	C002/S001	Source or Emission (		Landfill Operation			
facility which is o issued to BRE. To	wned and opera he captured gas f	ted by Bethlehem Rer Tow rate sent to the land	newable Ene dfill's enclose	rgy (BRE) in accord ed ground flare varie	rty landfill-gas-to-energy (LFGE) dance with a separate permit(s) s. Overall gas system collection l 75% for all other landfill areas).		
		SECTION E	3. MONIT	ORING			
The emissions ur	nit is exempted fro	om CAM because the	emission limi	tations or standards	s are:		
Yes No							
	Proposed by the EPA Administrator after November 15, 1990 pursuant to Sections 111 or 112 of the Clean Air Act.						
	Acid Rain Pro Approved und An emissions Determined b	der an emissions tradir cap that meets the rec y a continuous complia s for a backup utility po  Is owned by a r Is exempt from Is operated sole emergency situ Has annual ave major source co	rsuant to sec ng program. quirements s ance method ower emission municipality a all Part 75 m ely for providuations erage emission ut off and em	pecified in 40 CFR ( that does not use a ns unit as defined in and conitoring requirement ing power during pecons (for previous 3 y issions are expecte	§ 70.4(b)(12). an assumed control factor § 72.2 which:		
		SECTION O	CAM S	TATUS			
Yes No □ ⊠	Requirements	(be sure to include app s section of the applica	ition)	tion numbers under	Source Applicable		
		attached or has been s					
	An Implement	ation Plan is attached					

### APPENDIX A

Air Quality Compliance Review Form



### AIR POLLUTION CONTROL ACT COMPLIANCE REVIEW FORM

Fully and accu	urately provide the following information, as specified. Attach additional sheets as necessary.								
Type of Compliance Review Form Submittal (check all that apply)									
	Original Filing Date of Last Compliance Review Form Filing:								
Amended Filing <u>5/5/2017</u>									
Type of Submittal									
	n Approval								
	n of Plan Approval								
Other:									
	SECTION A. GENERAL APPLICATION INFORMATION								
	licant/Permittee/("applicant")								
l ,	tions-attach documentation of legal name)								
	ehem Landfill Corporation								
Address	2335 Applebutter Road								
	Bethlehem, PA 18015-6004								
Telephone	610-317-3200								
Permit, Plan	Approval or Application ID# Title V Permit No. 48-00027								
box) Individua Municipa Proprieto Public Co	lity								

#### SECTION B. GENERAL INFORMATION REGARDING "APPLICANT"

If applicant is a corporation or a division or other unit of a corporation, provide the names, principal places of business, state of incorporation, and taxpayer ID numbers of all domestic and foreign parent corporations (including the ultimate parent corporation), and all domestic and foreign subsidiary corporations of the ultimate parent corporation with operations in Pennsylvania. Please include all corporate divisions or units, (whether incorporated or unincorporated) and privately held corporations. (A diagram of corporate relationships may be provided to illustrate corporate relationships.) Attach additional sheets as necessary.

Unit Name	Principal Places of Business	State of Incorporation	Taxpayer ID	Relationship to Applicant
IESI PA Corporation	Knoxville, TN 37919	Delaware corporation	52-2175834	Intermediate parent
IESI Corporation	The Woodlands, TX 77380	Delaware corporation	75-2712191	Intermediate parent
Waste Connections Holdings Ltd.	Vaughn ON, L4K 0E3	Ontario corporation	76854 4322	Intermediate parent
Waste Connections of Canada Inc.	Vaughn ON, L4K 0E3	Ontario corporation	86680 8298	Intermediate parent
IESI-BFC Holdings Inc.	Vaughn ON, L4K 0E3	Ontario corporation	85807 1467	Intermediate parent
Waste Connections, Inc.	Vaughn ON, L4K 0E3	Ontario corporation	80578 6555	Ultimate parent

### SECTION C. SPECIFIC INFORMATION REGARDING APPLICANT AND ITS "RELATED PARTIES"

Pennsylvania Facilities. List the name and location (mailing address, municipality, county), telephone number, and relationship to applicant (parent, subsidiary or general partner) of applicant and all Related Parties' places of business, and facilities in Pennsylvania. Attach additional sheets as necessary.

Unit Name	Street Address	County and Municipality	Telephone No.	Relationship to Applicant
IESI PA Blue Ridge Landfill Corporation	PO Box 399 Scotland, PA 17254	Franklin County/Greene Township	717-709- 1700	Affiliate w/ operations in PA
Waste Connections of Maryland, Inc.	265 Brookview Centre Way, Suite 205 Knoxville TN 37919	Carroll County, MD	888-886- 1121	Affiliate w/ operations in PA

Provide the names and business addresses of all general partners of the applicant and parent and subsidiary corporations, if any.

Name	Business Address		

List the names and business address of persons with overall management responsibility for the process being permitted (i.e. plant manager).

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Name	Business Address
Kurt Shaner	265 Brookview Centre Way, Suite 205 Knoxville, TN 37919
Robert McReynolds	99 Wood Ave South Suite 1001 Iselin, NJ 08830
Donald Hallock	2335 Applebutter Road Bethlehem, PA 18015

Plan Approvals or Operating Permits. List all plan approvals or operating permits issued by the Department or an approved local air pollution control agency under the APCA to the applicant or related parties that are currently in effect or have been in effect at any time 5 years prior to the date on which this form is notarized. This list shall include the plan approval and operating permit numbers, locations, issuance and expiration dates. Attach additional sheets as necessary.

•				
Air Contamination Source	Plan Approval/ Operating Permit#	Location	Issuance Date	Expiration Date
IESI PA Bethlehem Landfill	48-00027	Northampton County/Lower Saucon Township	4/12/2013	4/12/2018
IESI PA Bethlehem Landfill	48-00027A	Northampton County/Lower Saucon Township	9/8/2017	3/7/2019
IESI PA Blue Ridge Landfill	28-05015	Franklin County/Greene Township	9/22/2015	9/30/2020

Compliance Background. (Note: Copies of specific documents, if applicable, must be made available to the Department upon its request.) List all documented conduct of violations or enforcement actions identified by the Department pursuant to the APCA, regulations, terms and conditions of an operating permit or plan approval or order by applicant or any related party, using the following format grouped by source and location in reverse chronological order. Attach additional sheets as necessary. See the definition of "documented conduct" for further clarification. Unless specifically directed by the Department, deviations which have been previously reported to the Department in writing, relating to monitoring and reporting, need not be reported.

Date	Location	Plan Approval/ Operating Permit#	Nature of Documented Conduct	Type of Department Action	Status: Litigation Existing/Continuing or Corrected/Date	Dollar Amount Penalty
11/13/2010	IESI PA Bethlehem Landfill	48-00027	Failure to control malodorous air contaminants	Notice of Violation	Corrected/Abated	\$0
						\$
						\$
						\$
						\$
						\$
						\$
						\$
						\$
						\$
						\$

List all incidents of deviations of the APCA, regulations, terms and conditions of an operating permit or plan approval or order by applicant or any related party, using the following format grouped by source and location in reverse chronological order. This list must include items both currently known and unknown to the Department. Attach additional sheets as necessary. See the definition of "deviations" for further clarification.

Date	Location	Plan Approval/ Operating Permit#	Nature of Deviation	Incident Status: Litigation Existing/Continuing Or Corrected/Date

<u>CONTINUING OBLIGATION</u>. Applicant is under a continuing obligation to update this form using the Compliance Review Supplemental Form if any additional deviations occur between the date of submission and Department action on the application.

#### **VERIFICATION STATEMENT**

Subject to the penalties of Title 18 Pa.C.S. Section 4904 and 35 P.S. Section 4009(b)(2), I verify under penalty of law that I am authorized to make this verification on behalf of the Applicant/Permittee. I further verify that the information contained in this Compliance Review Form is true and complete to the best of my belief formed after reasonable inquiry. I further verify that reasonable procedures are in place to ensure that "documented conduct" and "deviations" as defined in 25 Pa Code Section 121.1 are identified and included in the information set forth in this Compliance Review Form.

(0/2/60 M)
Signature

Date

Name (Print or Type)

District General Manager

Donald Hallock

Title