Check the Most Appropriate Answer and Fill in the Blanks.		
Regulation	40 CFR § 60.761 Definitions	Response
This MSWLF or Transfer Station is subject to the definitions in § 60.761?		☐ YES ☐ NO
Regulation	40 CFR § 60.762 - Standards for Air Emissions from MSWLF	Response
(b)(1)(ii)(B)	If the landfill is not permanently closed, skip to question (a) below.	☐ YES ☐ NO
If the landfill is closed,	have you submitted a closure notification as specified in § 60.767(e)	?
If NO, attach a written	explanation.	
(a)	Does this landfill have a design capacity less than 2.5 million megagrams by mass or 2.5 million cubic meters by volume?	☐ YES ☐ NO
If YES, submit an initia	al design capacity report as provided in § 60.767(a).	
If NO, skip to (b) below	V.	
(a)	Have you submitted an initial design capacity report as provided in § 60.767(a)?	☐ YES ☐ NO
If NO, submit an initial	design capacity report with this checklist.	
(a)(1)	Are you required to submit an amended design capacity report as provided in § 60.767(a)(3)?	☐ YES ☐ NO
If YES, submit an ame	nded design capacity report with this checklist.	
If NO, the remainder o	f the checklist does not apply.	
(a)(2)	Was this landfill previously exempted from the provisions of §60.762(b) through §60.769 of this subpart on the basis of the design capacity exemption in paragraph (a) of this section?	☐ YES ☐ NO
(a)(2)	Has there been an increase in the maximum design capacity of the landfill resulting in a revised maximum design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters?	YES NO
If YES, continue with t	he checklist.	
If NO, the remainder of the checklist does not apply.		
(b)	Does this landfill have a design capacity ≥ 2.5 million megagrams and 2.5 million cubic meters?	☐ YES ☐ NO
Note: The owner or operator of an MSW landfill subject to this subpart with a design capacity greater than or equal to 2.5 million megagrams and 2.5 million cubic meters is subject to 40 CFR 70 or 40 CFR 71 Operating permit requirements.		

Check the Most Appropriate Answer and Fill in the Blanks.		
Regulation	40 CFR § 60.762 - Standards for Air Emissions from MSWLF	Response
(b)	Does this landfill have a General Operating (GOP) or Site Operating (SOP) Permit or pending application for a federal operating permit?	☐ YES ☐ NO
GOP Permit No.:	SOP Permit No.:	
(b)	Have you calculated the NMOC emission rate using the procedures specified in § 60.764?	☐ YES ☐ NO
Note: The NMOC em	ission rate shall be recalculated annually, except as provided in § 60	.767(b)(1)(ii).
If NO, calculate NMOC	and return to this checklist.	
Use of EPA LandGEM	computer model is preferred or use the TCEQ spreadsheet for calculations	ulating NMOC.
What is the calculated NMOC emission rate in units of megagrams (Mg) per year for the current year?(Mg/yr)		
(b)(1)	Is the calculated NMOC emission rate less than 34 megagrams per year?	☐ YES ☐ NO
If NO, skip to (b)(2) be	low.	
(b)(1)(i)	Did you submit an annual emission report?	☐ YES ☐ NO
If NO, the report may be submitted with this checklist.		
Note: The annual emi	ission report shall be submitted, except as provided in § 60.767(b)(1))(ii).
(b)(1)(ii)	Will you recalculate the NMOC emission rate annually using the procedures specified in § 60.764(a)(1) until such time that the recalculated NMOC emission is ≥ 34 megagrams per year or the landfill is closed?	☐ YES ☐ NO
If NO, submit the repor	rt with this checklist.	
(b)(1)(ii)(A)	If the recalculated NMOC emission rate is greater than 34 megagrams per year, will a gas collection and control system be installed in compliance with § 60.762 (b)(2)?	☐ YES ☐ NO
(b)(1)(ii)(A)	If the recalculated NMOC emission rate is greater than 34 megagrams per year, will NMOC emissions be calculated using the next higher tier (Tier 2, or 3) in § 60.764?	☐ YES ☐ NO
(b)(1)(ii)(A)	If the recalculated NMOC emission rate is greater than 34 megagrams per year, will surface emission monitoring demonstration be conducted using the procedures specified in § 60.764(a)(6)?	☐ YES ☐ NO
If NO to all, attach a w	ritten explanation.	

Check the Most Appropriate Answer and Fill in the Blanks.		
Regulation	40 CFR § 60.762 - Standards for Air Emissions from MSWLF	Response
(b)(2)	Is the calculated NMOC emission rate ≥ 34 megagrams per year using Tier 1, 2, or 3 procedures?	☐ YES ☐ NO
If YES, answer (b)(2)(i)) below.	
If NO, a GCCS does no	ot have to be installed at this time	
(b)(2)(i)	Will one of the following be completed?	☐ YES ☐ NO
	lection and control system design plan prepared by a professional en hin 1 year as specified in §60.767(c)	ngineer to the
Note: The collection a section.	nd control system must meet the requirements in paragraphs (b)(2)(ii) and (iii) of this
☐ calculate NMOC	emissions using the next higher tier in §60.764	
conduct a surface	e emission monitoring demonstration using the procedures specified	in §60.764(a)(6)
(b)(2)(ii)(A)	Has Tier 2 or Tier 3 sampling as specified in § 60.767(c)(4) demonstrated that the NMOC emission rate is less than 34 megagrams per year?	☐ YES ☐ NO
(b)(2)(ii)(B)	Has Tier 4 sampling as specified in § 60.767(c)(4)(iii) demonstrated that site-specific surface methane emissions are below 500 parts per million?	☐ YES ☐ NO
Recalculate the NMOC time that the recalculat	not have to be installed until such time the NMOC is \geq 34 megagrams emission rate annually using the procedures specified in § 60.764(a ed NMOC emission is \geq 34 megagrams per year or the landfill is clos of the checklist at this time.	a)(1) until such
If NO, answer the next	question.	
(b)(2)(ii)	Have you installed, or will you install within 30 months after the first annual report of an NMOC emission rate ≥34 megagrams per year or within 30 months after the first emission rate report of an NMOC emission rate ≥ 34 megagrams based on Tier 2, a GCCS that captures the gas generated within the landfill as required by paragraph (b)(2)(ii)(C) or (b)(2)(ii)(D) and (b)(2)(iii) of this section?	☐ YES ☐ NO
If NO, attach a detailed	explanation.	
(b)(2)(ii)(C)	Have you installed, or will you install, an active collection system?	☐ YES ☐ NO
If NO, attach a detailed	d explanation and skip to (b)(2)(ii)(D) below.	

Check the Most Appropriate Answer and Fill in the Blanks.		
Regulation	40 CFR § 60.762 - Standards for Air Emissions from MSWLF	Response
(b)(2)(ii)(C)(1)	Is the existing or proposed active collection system designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended useful period of the gas control or treatment system equipment?	☐ YES ☐ NO
Maximum Landfill Gas	Flow Rate (include units of flow):	
(b)(2)(ii)(C)(2)	Does the existing or proposed active collection system collect gas from each area, cell, or group of cells in the landfill in which the initial solid waste has been placed for the indicated periods?	☐ YES ☐ NO
Check the appropriate	answer to the right and the appropriate box(es) below.	
☐ 5 years or more	if active	
2 years or more if closed or at final grade		
(b)(2)(ii)(C)(3)	Is the existing or proposed active collection system designed to collect gas at a sufficient extraction rate?	☐ YES ☐ NO
If NO, attach a detailed	d explanation.	
(b)(2)(ii)(C)(4)	Is the existing or proposed active collection system designed to minimize off-site migration of subsurface gas?	☐ YES ☐ NO
If NO, attach a detaile	d explanation.	
(b)(2)(ii)(D)	Have you installed, or will you install, a passive collection system?	☐ YES ☐ NO
If YES, attach a detaile	ed explanation.	
If NO, skip to (b)(2)(iii) below.		
(b)(2)(ii)(D)(1)	Is the existing or proposed passive collection system designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control or treatment system equipment?	☐ YES ☐ NO
Maximum Landfill Gas Flow Rate (include units of flow):		

Check the Most Appropriate Answer and Fill in the Blanks.			
Regulation	40 CFR § 60.762 - Standards for Air Emissions from MSWLF	Response	
If NO, attach a detailed	d explanation.		
(b)(2)(ii)(D)(1)	Does the existing or proposed passive collection system collect gas from each area, cell, or group of cells in the landfill in which the initial solid waste has been placed for the indicated periods?	☐ YES ☐ NO	
Check the appropriate	answer to the right and the appropriate box(es) below:		
☐ 5 years or more	if active		
☐ 2 years or more	if closed or at final grade		
(b)(2)(ii)(D)(1)	Is the existing or proposed passive collection system designed to minimize off-site migration of subsurface gas?	☐ YES ☐ NO	
If NO, attach a detailed	If NO, attach a detailed explanation.		
(b)(2)(ii)(D)(2)	Is the existing or proposed passive collection system installed with liners installed as required under § 258.40 on the bottom and all sides in all areas in which gas is to be collected?	☐ YES ☐ NO	
If NO, attach a detailed	d explanation.		
(b)(2)(iii)	Did you route, or will you route, all the collected gas to a control system that complies with the requirements in paragraph (b)(2)(iii)(A), (b)(2)(iii)(B), or (b)(2)(iii)(C) below?	☐ YES ☐ NO	
If NO, attach a detailed	d explanation.		
(b)(2)(iii)(A)	Is the existing or proposed control system an open flare, designed and operated in accordance with § 60.18 except as noted in § 60.764(e)?	☐ YES ☐ NO	
If, YES, and you would like to apply for a performance test waiver for the landfill flare under § 60.18(a)(4), fill out the Flare Performance Test Waiver Form and attach to this checklist.			
If NO, attach a detailed explanation.			
(b)(2)(iii)(B)	Is the existing or proposed control system an enclosed combustion device?	☐ YES ☐ NO	

Check the Most Appropriate Answer and Fill in the Blanks.		
Regulation	40 CFR § 60.762 - Standards for Air Emissions from MSWLF	Response
If NO, skip to (b)(2)(iii)	(C) below.	
(b)(2)(iii)(B)	Does the existing or proposed enclosed combustion device either reduce NMOC by 98 weight percent or reduce the outlet NMOC concentration to less than 20 parts per million by volume, dry basis as hexane at 3 percent oxygen?	☐ YES ☐ NO
Note: The reduction efficiency or parts per million by volume shall be established by an initial performance test to be completed no later than 180 days after the initial startup of the approved control system using the test methods specified in § 60.764(d). The performance test is not required for boilers and process heaters with design heat input capacities equal to or greater than 44 megawatts that burn landfill gas for compliance with this subpart.		
If NO, attach a detailed	d explanation.	
(b)(2)(iii)(B)(1)	If a boiler or process heater is used as the control device, is the landfill gas stream introduced, or will it be introduced, into the flame zone?	☐ YES ☐ NO
If NO, attach a detailed	d explanation.	
(b)(2)(iii)(B)(2)	Is the existing or proposed control device operated within the parameter ranges established during the initial or most recent performance test?	YES NO
Note: The operating p	parameters to be monitored are specified in § 60.766.	
If NO, attach a detailed	d explanation.	
(b)(2)(iii)(C)	Is the collected gas routed, or will it be routed, to a treatment system that processes the collected gas for subsequent sale or use?	☐ YES ☐ NO
Note: Venting of treated landfill gas to the ambient air is not allowed. If the treated landfill gas cannot be routed for subsequent sale or beneficial use, then the treated landfill gas must be controlled according to either paragraph (b)(2)(iii)(A) or (B) of this section.		
(b)(2)(iii)(D)	Will all emissions from any atmospheric vent from the gas treatment system meet the requirements of paragraph (b)(2)(iii)(A) or (B) of this section?	☐ YES ☐ NO
Note: For purposes of this subpart, atmospheric vents located on the condensate storage tank are not part of the treatment system and are exempt from the requirements of paragraph (b)(2)(iii)(A) or (B) of this section.		
If NO, attach a detailed explanation.		
(b)(2)(iv)	Is the existing or proposed collection and control device operated in accordance with the provisions of §§ 60.763, 60.765, and 60.766?	☐ YES ☐ NO

Check the Most Appropriate Answer and Fill in the Blanks.		
Regulation	40 CFR § 60.762 - Standards for Air Emissions from MSWLF	Response
If NO, attach a detailed	d explanation.	
(b)(2)(v)	Will the collection and control system be capped or removed?	☐ YES ☐ NO
If NO, skip to (c) below	<i>I</i> .	
If YES, the conditions	of paragraph $(b)(2)(v)(A)$, $(b)(2)(v)(B)$, and $(b)(2)(v)(C)$ must be met.	
(b)(2)(v)(A)	Is the landfill a closed landfill as defined in § 60.761?	☐ YES ☐ NO
(b)(2)(v)(A)	Has a closure report been submitted to the Administrator as provided in § 60.767(e)?	☐ YES ☐ NO
(b)(2)(v)(B)	Has the collection and control system been in operation for a minimum of 15 years or have you demonstrated that the GCCS will be unable to operate for 15 years due to declining gas flow?	☐ YES ☐ NO
(b)(2)(v)(C)	Following the procedures specified in § 60.764(b) of this subpart, has the calculated NMOC gas produced by the landfill been less than 34 megagrams per year on three successive test dates?	☐ YES ☐ NO
Note: Attach the calcu	ulations to this checklist.	
(b)(2)(v)(C)	List the test dates (mm/dd/yyyy):	
Note: The test dates	shall be no less than 90 days apart, and no more than 180 days apar	t.
(c)	Does this landfill require a Title V permit?	☐ YES ☐ NO
Note: For purposes of obtaining an operating permit under Title V, the owner or operator of a MSWLF landfill subject to this subpart with a design capacity less than 2.5 million megagrams or 2.5 million cubic meters is not subject to the requirement to obtain an operating permit for the landfill under 40 CFR 70 or 40 CFR 71, unless the landfill is otherwise subject to either 40 CFR 70 or 40 CFR 71.		
(c)	Have you submitted, or are you submitting, a timely application for an operating permit?	☐ YES ☐ NO
If YES, (c)(1) or (c)(2) below must be met.		
If NO, explain in detail		

Check the Most Appropriate Answer and Fill in the Blanks.			
Regulation	40 CFR § 60.762 - Standards for Air Emissions from MSWLF	Response	
Note: The owner or operator of a MSW landfill subject to this subpart with a design capacity greater than or equal to 2.5 million megagrams and 2.5 million cubic meters, and not otherwise subject to either parts 70 or 71, becomes subject to the requirements of § 70.5(a)(1)(i) or § 71.5(a)(1)(i) of this chapter, regardless of when the design capacity report is actually submitted, no later than the appropriate date in (c)(1) or (c)(2) below.			
If" NO," attach a detaile	ed explanation.		
(c)(1)	Was the application for an operating permit submitted by November 28, 2016?	☐ YES ☐ NO	
Note: This date applies to MSW landfills that commenced construction, modification, or reconstruction on or after July 17, 2014 but before August 29, 2016.			
If NO, attach a detailed explanation. For example, LF expansion was after November 28, 2016.			
(c)(2)	Has the application for an operating permit been submitted, or will it be submitted, within ninety (90) days after the date of commenced construction, modification, or reconstruction?	YES NO	
Note: This timeframe applies to MSW landfills that commence construction, modification, or reconstruction on or after August 29, 2016.			
If NO, attach a detailed	d explanation.		
(d)	Has this landfill been closed, or will it be closed?	☐ YES ☐ NO	
Note: If YES, the owner operator is no longer subject to the requirement to maintain an operating permit under parts 70 or 71 if the landfill is not otherwise subject to the requirements of either part 70 or 71.			
If NO, skip the remaind	der of (d).		
(d)	Was this landfill subject to the requirements of either part 70 or 71?	☐ YES ☐ NO	
Note: Unless this MSW landfill is otherwise subject to the requirements of either part 70 or 71, you are no longer subject to the requirement to maintain an operating permit under parts 70 or 71 of this chapter if either (d)(1) or (d)(2) below is met.			
(d)(1)	Was the landfill ever subject to the requirement for a control system under paragraph (b)(2) of this section?	☐ YES ☐ NO	
(d)(2)	Are the conditions for control system removal specified in paragraph (b)(2)(v) met?	☐ YES ☐ NO	

Check the Most Appropriate Answer and Fill in the Blanks.		
Regulation	40 CFR § 60.763 Operational Standards for Collection and Control Systems	Response
Does this landfill have the provisions of § 60.	a gas collection and control system (GCCS) used to comply with 762(b)(2)?	☐ YES ☐ NO
If NO, attach a detaile	d explanation and skip the remainder of this section (§ 60.763) of the	checklist.
Note: Compliance with § 60.762(b)(2) is required within 30 months after the first annual report in which the emission rate equals or exceeds 34 megagrams per year, unless Tier 2 or Tier 3 sampling demonstrates that the emission rate is less than 34 megagrams per year, as specified in § 60.767(c)(4), or Tier 4 surface emissions monitoring shows a surface methane emission concentration of less than 500 parts per million, as specified in § 60.767(c)(4)(iii).		
(a)	Will the collection system operate such that gas is collected from each area, cell, or group of cells in which solid waste has been in place for the following periods?	☐ YES ☐ NO
☐ 5 years or more	if active	
☐ 2 years or more	if closed or at final grade	
(b)	Will the collection system be operated with negative pressure at each wellhead except under the following conditions?	☐ YES ☐ NO
a fire or increase	ed well temperature	
Note: The owner or o	perator shall record instances when positive pressure occurs in effort	ts to avoid a fire.
These records shall be	e submitted with the annual reports as provided in § 60.767(g)(1).	
use of a geo me	mbrane or synthetic cover	
Note: The owner or o	perator shall develop acceptable pressure limits in the GCCS design	plan.
a decommission	ed well	
Note: A well may experience a static positive pressure after shutting down to accommodate for declining flows.		
All design changes shall be approved by the Agency, as specified in § 60.767(c).		
If NO, a passive collec	tion system must comply with the provisions of § 60.762(b)(2)(ii)(D)	
(c)	Will each interior wellhead in the collection system operate with a landfill gas temperature less than 55 degrees Celsius?	☐ YES ☐ NO

Check the Most Appropriate Answer and Fill in the Blanks.		
Regulation	40 CFR § 60.763 Operational Standards for Collection and Control Systems	Response
Note: The owner or o	operator may establish a higher operating temperature at a particular	well.
	mperature demonstration shall show supporting data that the elevated nificantly inhibit anaerobic decomposition by killing methanogens.	parameter does
Attach supporting dat	a.	
(d)	Will the collection system be operated so that the methane concentration is less than 500 parts per million above background at the surface of the landfill?	YES NO
Note: To determine if this level is exceeded, the owner or operator shall conduct surface testing, using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in § 60.765(d), around the perimeter of the collection area and along a pattern that traverses the landfill at 30-meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. The owner or operator may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan shall be developed that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30-meter intervals. Areas with steep slopes or other dangerous areas may be excluded from the surface testing.		
If NO, attach a detaile	ed explanation.	
(e)	Will the collection system be operated such that all collected gases are vented to a control system designed and operated in compliance with § 60.762(b)(2)(iii)?	☐ YES ☐ NO
Note: In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the gas collection and control system contributing to venting of the gas to the atmosphere shall be closed within 1 hour.		
If NO, attach a detaile	ed explanation.	
(f)	Will the control or treatment system be operated at all times when the collected gas is routed to the system?	☐ YES ☐ NO
If NO, attach a detailed explanation.		
(g)	If monitoring demonstrates that the operational requirements in paragraphs (b), (c), or (d) of this section are not met, will corrective action be taken as specified in § 60.765(a)(3), and § 60.765(a)(5) or § 60.765(c)?	☐ YES ☐ NO
Note: If corrective actions are taken as specified in \S 60.765, the monitored exceedance is not a violation of the operational requirements in this section.		

Check the Most Appropriate Answer and Fill in the Blanks.		
Regulation	40 CFR § 60.764 Test Methods and Procedures	Response
If NO, attach a detaile	d explanation.	
(a)(1)	Tier 1 Are you calculating the NMOC emission rate for the landfill for the first time under Tier 1?	☐ YES ☐ NO
	lating the NMOC emission rate for purposes of determining when the n be removed as provided in § $60.762(b)(2)(v)$, answer this question	
If YES, you may use either the equation provided in paragraph (a)(1)(i) of this section or the equation provided in paragraph (a)(1)(ii) of this section. Both equations may be used if the actual year-to-year solid waste acceptance rate is known, as specified in paragraph (a)(1)(i), for part of the life of the landfill and the actual year-to-year solid waste acceptance rate is unknown, as specified in paragraph (a)(1)(ii), for part of the life of the landfill. The values to be used in both equations are 0.05 per year for k , 170 cubic meters per megagram for Lo, and 4,000 parts per million by volume as hexane for the $C_{\rm NMOC}$. For landfills located in geographical areas with a thirty-year annual average precipitation of less than 25 inches, as measured at the nearest representative official meteorological site, the k value to be used is 0.02 per year.		
(a)(1)(i)(A)	Did you use the following equation for years in which the actual year-to-year solid waste acceptance rate is known?	☐ YES ☐ NO
n $M_{NMOC} = \Sigma \ 2 \ k \ L_o \ Mi \ (e^{-kt_i})(C_{NMOC})(3.6 \times 10^{-9})$ i=1 where $M_{NMOC} = Total \ NMOC$ emission rate from the landfill, megagrams per year k=methane generation rate constant, year-1 L_o =methane generation potential, cubic meters per megagram solid waste M_i =mass of solid waste in the ith section, megagrams t_i =age of the i^{th} section, years C_{NMOC} =concentration of NMOC, parts per million by volume as hexane 3.6×10^{-9} =conversion factor		
Note: The mass of nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value for M_i if documentation of the nature and amount of		

such wastes is maintained.

Check the Most Appropriate Answer and Fill in the Blanks.			
Regulation	40 CFR § 60.764 Test Methods and Procedures	Response	
(a)(1)(ii)(A)	Did you use the following equation for years in which the actual year-to-year solid waste acceptance rate is unknown?	☐ YES ☐ NO	
$M_{NMOC} = 2L_{\circ} R (e^{-kc} - e^{-kt}) C_{NMOC} (3.6 \times 10^{-9})$ where: $M_{NMOC} = 2L_{\circ} R (e^{-kc} - e^{-kt}) C_{NMOC} (3.6 \times 10^{-9})$ where: $M_{NMOC} = 2L_{\circ} R (e^{-kc} - e^{-kt}) C_{NMOC} (3.6 \times 10^{-9})$ where: $M_{NMOC} = 2L_{\circ} R (e^{-kc} - e^{-kt}) C_{NMOC} (3.6 \times 10^{-9})$ where: $M_{NMOC} = 2L_{\circ} R (e^{-kc} - e^{-kt}) C_{NMOC} (3.6 \times 10^{-9})$ where: $M_{NMOC} = 2L_{\circ} R (e^{-kc} - e^{-kt}) C_{NMOC} (3.6 \times 10^{-9})$ where: $M_{NMOC} = 2L_{\circ} R (e^{-kc} - e^{-kt}) C_{NMOC} (3.6 \times 10^{-9})$ where: $M_{NMOC} = 2L_{\circ} R (e^{-kc} - e^{-kt}) C_{NMOC} (3.6 \times 10^{-9})$ where: $M_{NMOC} = 2L_{\circ} R (e^{-kc} - e^{-kt}) C_{NMOC} (3.6 \times 10^{-9})$ where: $M_{NMOC} = 2L_{\circ} R (e^{-kc} - e^{-kt}) C_{NMOC} (3.6 \times 10^{-9})$ where: $M_{NMOC} = 2L_{\circ} R (e^{-kc} - e^{-kt}) C_{NMOC} (3.6 \times 10^{-9})$ where: $M_{NMOC} = 2L_{\circ} R (e^{-kc} - e^{-kt}) C_{NMOC} (3.6 \times 10^{-9})$ where: $M_{NMOC} = 2L_{\circ} R (e^{-kc} - e^{-kt}) C_{NMOC} (3.6 \times 10^{-9})$ where: $M_{NMOC} = 2L_{\circ} R (e^{-kc} - e^{-kt}) C_{NMOC} (3.6 \times 10^{-9})$ where: $M_{NMOC} = 2L_{\circ} R (e^{-kc} - e^{-kt}) C_{NMOC} (3.6 \times 10^{-9})$ where: $M_{NMOC} = 2L_{\circ} R (e^{-kc} - e^{-kt}) C_{NMOC} (3.6 \times 10^{-9})$ where: $M_{NMOC} = 2L_{\circ} R (e^{-kc} - e^{-kt}) C_{NMOC} (3.6 \times 10^{-9})$ where: $M_{NMOC} = 2L_{\circ} R (e^{-kc} - e^{-kt}) C_{NMOC} (3.6 \times 10^{-9})$ where: $M_{NMOC} = 2L_{\circ} R (e^{-kc} - e^{-kt}) C_{NMOC} (3.6 \times 10^{-9})$ where: $M_{NMOC} = 2L_{\circ} R (e^{-kc} - e^{-kt})$ where: $M_{NMOC} = 2L_{\circ} R (e^{-kc} - e^{kc})$ where: $M_{NMOC} = 2L_{\circ} R (e^{-kc} - e^{-kc})$ where: $M_$			
Note: The mass of nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value for R, if documentation of the nature and amount of such wastes is maintained.			
(a)(1)	What is the NMOC emission rate calculated using the above equation(s)?		
	megagrams per year		
Check which equation	n applies.		
☐ (a)(1)(i)(A)			
☐ (a)(1)(ii)(A)			
(a)(2)	Tier 1 Compare the NMOC emission rate calculated in (a)(1) above to 34 megagrams per year.	o the standard of	
Check which one app	lies:		
the calculated NMOC emission rate is less than 34 megagrams per year			
(a)(2)(i)	Tier 1 If the calculated NMOC emission rate is less than 34 megagram both of the following:	ms per year, do	
recalculate the l	NMOC mass emission rate annually as required under § 60.762(b)		

Check the Most Appropriate Answer and Fill in the Blanks.			
Regu	Regulation 40 CFR § 60.764 Test Methods and Procedures Response		
(a)(2)	Tier 1 If the calculated NMOC emission rate is ≥ 34 megagrams per year, do either of the following:		year, do either of
		llection and control system design plan within 1 year as specified in § ate a gas collection and control system within 30 months according to	
		e-specific NMOC concentration and recalculate the NMOC emission ravided in paragraph (a)(3) of this section	ate using the Tier 2
		e-specific NMOC concentration and recalculate the NMOC emission ravided in paragraph (a)(4) of this section	ate using the Tier 3
(a)(3))	Tier 2 Are you required to determine the NMOC concentration?	☐ YES ☐ NO
If NO	, skip to (a)(4) be	elow.	
(a)(3))	Tier 2 Determine the NMOC concentration using the following sample	ng procedure:
	install at least tv 2 years	vo sample probes per hectare of landfill surface that has retained was	te for at least
	if the landfill is la	arger than 25 hectares in area, only 50 samples are required	
	the sample prob	es should be located to avoid known areas of nondegradable solid w	aste
	the owner or operator shall collect and analyze one sample of landfill gas from each probe to determine the NMOC concentration using Method 25 or 25C of Appendix A		probe to determine
	taking composite samples from different probes into a single cylinder is allowed; however, equal sample volumes must be taken from each probe		
	for each composite, the sampling rate, collection times, beginning and ending cylinder vacuums, or alternative volume measurements must be recorded to verify that composite volumes are equal		
	composite sample volumes should not be less than one liter unless evidence can be provided to substantiate the accuracy of smaller volumes		
	terminate compositing before the cylinder approaches ambient pressure where measurement accuracy diminishes		
	if more than the	required number of samples are taken, all samples must be used in t	he analysis
	the landfill owner or operator must divide the NMOC concentration from Method 25 or 25C of Appendix A by six to convert from CNMOC as carbon to CNMOC as hexane		
	collected from the	s an active or passive gas removal system in place, Method 25 or 250 nese systems instead of surface probes provided the removal system g as representative as the two-sampling probe per hectare requireme	can be shown to

Check the Most Appropriate Answer and Fill in the Blanks.				
Regu	Regulation 40 CFR § 60.764 Test Methods and Procedures Response			
		ection systems (already installed to control odor, etc.), samples may be collected from the der pipe before the gas moving or condensate removal equipment (preapproval is not		
	for these syster	ms, a minimum of three samples must be collected from the header pip	oe	
(a)(3)(i)	Tier 2. Within 60 days after the date of completing each performance operator must submit the results according to § 60.767(i)(1).	test, the owner or	
(a)(3	Tier 2. Recalculate the NMOC emission rate using the equations provided in paragram (a)(1)(i) or (a)(1)(ii) of this section and using the average NMOC concentration from the collected samples instead of the default value in the equation provided in paragraph (a)(1) of this section.			
(a)(3)(ii)	Tier 2. What is the NMOC emission rate calculated using the Tier 2 n (a)(3)(ii) above?	nethod specified in	
-		megagrams per year		
(a)(3)(iii) Tier 2 If the resulting NMOC emission rate calculated using the site-specific NMC concentration is less than 34 megagrams per year, then do one of the following:		•		
	submit a periodic estimate of the emission rate report as provided in § 60.767(b)(1), and			
	recalculate the	NMOC mass emission rate annually as required under § 60.762(b), ar	nd	
	retest the site-specific NMOC concentration every 5 years using the methods specified in this section			
(a)(3)(3)(iv) Tier 2 If the resulting NMOC emission rate is greater than or equal to 34 megagrams per year, do one of the following:		34 megagrams	
	submit a gas collection and control system design plan within 1 year as specified in §60.767(c) and install and operate a gas collection and control system within 30 months according to §60.762(b)(2)(ii) and (iii)			
	determine a site-specific methane generation rate constant and recalculate the NMOC emission rate using the site-specific methane generation rate using the Tier 3 procedures specified in paragraph (a)(4) of this section; or			
	conduct a surface emission monitoring demonstration using the Tier 4 procedures specified in paragraph (a)(6) of this section			
(a)(4	(a)(4) Tier 3 Are you required to calculate a site-specific methane generation rate constant?		☐ YES ☐ NO	
If NO, skip to (a)(5) below.				

Check the Most Appropriate Answer and Fill in the Blanks.				
Regu	ılation	40 CFR § 60.764 Test Methods and Procedures	Response	
(a)(4))	Tier 3 Did you use the procedures provided in Method 2E of Appendix A to calculate the site-specific methane generation rate constant?	YES NO	
section conc	If YES, you should estimate the NMOC emission rate using equations in paragraph (a)(1)(i) or (a)(1)(ii) of this section and using a site-specific methane generation rate constant k, and the site-specific NMOC concentration as determined in paragraph (a)(3) of this section instead of the default values provided in paragraph (a)(1) of this section.			
		I explanation of the method used, as allowed under \S 60.764(a)(5), as required by \S 60.760(b) and skip to (a)(5) below.	nd a copy of the	
(a)(4))	Tier 3 What is the NMOC emission rate calculated using the site-spegeneration rate and concentration of NMOC?	ecific methane	
-		megagrams per year		
(a)(4) Tier 3 Compare the NMOC emission rate calculated in (a)(4) above to the standa 34 megagrams per year.		to the standard of		
	the calculated Ni	MOC emission rate is ≥34 megagrams per year		
	the calculated NMOC emission rate is < 34 megagrams per year			
(a)(4)(i) Tier 3 If the NMOC emission rate as calculated using the site-specific method generation rate and concentration of NMOC is greater than or equal to 34 mper year, do one the following:				
	submit a gas collection and control system design plan within 1 year as specified in §60.767(c) and install and operate a gas collection and control system within 30 months according to § 60.762(b)(2)(ii) and (iii), or			
	conduct a surface emission monitoring demonstration using the Tier 4 procedures specified in paragraph (a)(6)		ecified in	
(a)(4))(ii)	Tier 3 If the calculated NMOC emission rate is < 34 megagrams per the following:	year, do both of	
	submit a periodic	emission rate report as provided in § 60.767(b)(1), and		
	recalculate the NMOC mass emission rate annually using Equation 1 or Equation 2 in paragraph (a)(1) of this section and using the site-specific Tier 2 NMOC concentration and Tier 3 methane generation rate constant and submit a periodic NMOC emission rate report as provided in §60.767(b)(1)			
Note: The calculation of the methane generation rate constant is performed only once, and the value obtained from this test shall be used in all subsequent annual NMOC emission rate calculations.				

Check the Most Appropriate Answer and Fill in the Blanks.			
Regulation	40 CFR § 60.764 Test Methods and Procedures	Response	
(a)(5)	Have you used other methods to determine the NMOC concentration or a site-specific k as an alternative to the methods required in paragraphs (a)(3) and (a)(4) above?	☐ YES ☐ NO	
If NO, skip to (b) below	w.		
(a)(5)	Have the alternatives to the methods required in paragraphs (a)(3) and (a)(4) of this section been approved by the US Environmental Protection Agency?	☐ YES ☐ NO	
If NO, then such alter	native methods may not be used.		
	e approval of these alternatives is retained by the EPA and cannot be O(b). If you have received such approval, please attach a copy of the r ification purposes		
(a)(6)	Tier 4 Are you required to demonstrate that surface methane emissions are below 500 parts per million?	☐ YES ☐ NO	
If NO, then skip to (b)	below		
If YES, note that Tier 4 is only allowed if NMOC emissions calculated using Tier 1 or 2 are ≥ 34 megagrams per year and < 50 megagrams per year and landfill must meet criteria in (a)(6)(viii) of this section. If both Tier 1 and Tier 2 indicate NMOC emissions of ≥ 50 megagrams per year, Tier 4 cannot be used.			
(a)(6)(i)	Tier 4 Are surface concentrations of methane measured along the perimeter of the landfill and along a pattern that traverses the landfill at no more than 30-meter intervals using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specification provided in § 60.765(d)?	☐ YES ☐ NO	
(a)(6)(ii)	Tier 4 Is the background concentration determined by moving the probe inlet upwind and downwind at least 30 meters from the waste mass boundary of the landfill?	☐ YES ☐ NO	
(a)(6)(iii)	Tier 4 Is surface emission monitoring performed in accordance with section 8.3.1 of Method 21 of appendix A of this part, except that the probe inlet must be placed no more than 5 centimeters above the landfill surface?	☐ YES ☐ NO	
(a)(6)(iii)	Tier 4 Is the constant measurement of distance above the surface based on a mechanical device such as with a wheel on a pole, except as described in paragraph (a)(6)(iii)(A)?	☐ YES ☐ NO	

Check the Most Appropriate Answer and Fill in the Blanks.					
Regulation	40 CFR § 60.764 Test Methods and Procedures	Response			
(a)(6)(iii)(A)	Tier 4 Is a wind barrier used when onsite average wind speed exceeds 4 mph or 2 meters per second or gusts exceed 10 mph?	☐ YES ☐ NO			
anemometer with a co wind barrier must surr	Note: Average onsite wind speed must be determined in an open area at 5-minute intervals using an onsite anemometer with a continuous recorder and data logger for the entire duration of the monitoring event. The wind barrier must surround the SEM monitor, and must be placed on the ground, to ensure wind turbulence is blocked. SEM cannot be conducted if average wind speed exceeds 25 miles per hour.				
(a)(6)(iii)(B)	Tier 4 Are landfill face areas where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover, and all cover penetrations monitored using a device meeting specification in § 60.765(d)?	☐ YES ☐ NO			
(a)(6)(iv)	Tier 4 Are records of surface emission monitoring maintained as provide in § 60.768(g) and has a Tier 4 surface emissions report been submitted as provided in § 60.767(c)(4)(iii)?	☐ YES ☐ NO			
(a)(6)(v)	Tier 4 Has there been any measured concentration of methane of 500 parts per million or greater from the surface of the landfill?	☐ YES ☐ NO			
If NO, skip to (a)(6)(vi).				
If YES, continue to the next question.					
(a)(6)(v)	Tier 4 Has a gas collection and control system design plan been submitted within 1 year of the first measured concentration of methane of 500 parts per million or greater according to § 60.767(c)?	☐ YES ☐ NO			
(a)(6)(v)	Tier 4 Has a gas collection and control system, according to § 60.762(b)(2)(ii) and (iii), been installed and operated within 30 months of the most recent NMOC emission rate report in which NMOC emission rate ≥ 34 megagrams per year based on Tier 2?	☐ YES ☐ NO			
(a)(6)(vi)	Tier 4 If after 4 consecutive quarterly monitoring periods at a landfill, other than a closed landfill, there is no measured concentration of methane of 500 parts per million or greater, will quarterly surface emission monitoring using the methods in this section be continued?	☐ YES ☐ NO			
(a)(6)(vii)	Tier 4 If after 4 consecutive quarterly monitoring periods at a closed landfill there is no measured concentration of methane of 500 parts per million or greater, will annual surface emission monitoring using the methods specified in this section be conducted?	☐ YES ☐ NO			

Check the Most Appropriate Answer and Fill in the Blanks.			
Regulation	40 CFR § 60.764 Test Methods and Procedures	Response	
(a)(6)(viii)	Tier 4 If a landfill has installed and operates a collection and control system not required by this subpart, then the system must meet the following:		
system must have monitoring demo	ve operated for 6570 out of 8760 hours preceding the Tier 4 surface ϵ onstration, and	emissions	
	nitoring demonstration, the system must operate as it normally would landfill gas as possible	to collect and	
(b)	After a gas collection and control system (GCCS) been installed in compliance with § 60.765, are you seeking to determine when the GCCS can be removed as provided in § 60.762(b)(2)(v)?	☐ YES ☐ NO	
If NO, skip to (c) below	V.		
(b)	To determining when the system can be capped, removed or decomprovided in §60.762(b)(2)(v), you shall calculate the NMOC emission following equation.		
M_{NMOC} = 1.89 × 10 ⁻³ Q_{LFG} C_{NMOC} where, M_{NMOC} = mass emission rate of NMOC, megagrams per year Q_{LFG} = flow rate of landfill gas, cubic meters per minute C_{NMOC} = NMOC concentration, parts per million by volume as hexane			
the common header p	f landfill gas, Q _{LFG} , shall be determined by measuring the total landfill ipe that leads to the control device using a gas flow measuring device sions of section 10 of Method 2E of Appendix A.		
Note: The average NMOC concentration, CNMOC, shall be determined by collecting and analyzing landfill gas sampled from the common header pipe before the gas moving or condensate removal equipment using the procedures in Method 25C or Method 25 of Appendix A. The sample location on the common header pipe shall be before any condensate removal or other gas refining units. The landfill owner or operator shall divide the NMOC concentration from Method 25 or Method 25C of Appendix A by six to convert from C_{NMOC} as carbon to C_{NMOC} as hexane.			
Note: The owner or operator may use another method to determine landfill gas flow rate and NMOC concentration if the method has been approved by the Agency. If using an alternate method, please attach a detailed explanation.			
	after the date of completing each performance test, the owner or open including any associated fuel analyses, according to § 60.767(i)(1)	erator must submit	
(c)	Are you required to calculate emissions for PSD purposes?	☐ YES ☐ NO	
If NO, skip to (d) below	v.		

Check the Most Appropriate Answer and Fill in the Blanks.			
Regulation	40 CFR § 60.764 Test Methods and Procedures	Response	
(c)	Have AP–42 or other approved measurement procedures been used to estimate the NMOC emission rate for comparison to the PSD major source and significance levels in §§51.166 or 52.21 of this chapter?	☐ YES ☐ NO	
Note: Attach the cald	culations and an explanation of the methodology used.		
(d)	Does the gas collection and control system (GCCS) design plan include any alternatives to the test methods provisions of § 60.764?	☐ YES ☐ NO	
If YES, attach a detail	led explanation.		
(d)	Have you completed (or will you perform) the gas control system initial performance test required in § 60.762(b)(2)(iii)(B)?	☐ YES ☐ NO	
Note: The following	equation shall be used to calculate efficiency:		
where, NMOC _{in} = ma	NMOC _{in} - NMOC _{out})/(NMOC _{in}) uss of NMOC entering control device NMOC exiting control device		
(d)	Which test method will be used to determine compliance with the 98 weight-percent efficiency or the 20 ppmv outlet concentration level requirement?		
☐ Method 25			
☐ Method 25C			
☐ Method 18			
another method	approved by the Agency as provided by § 60.762(b)(2)(i)(B)		
Note: In cases where the outlet concentration is less than 50 ppm NMOC as carbon (8 ppm NMOC as hexane), Method 25A should be used in place of Method 25.			
Note: If using Method 18 of Appendix A, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP–42).			
Note: If using an alternate method, please attach a detailed explanation.			
(d)	Which test method will be used to determine oxygen for correcting th concentration as hexane to 3 percent?	e NMOC	
☐ Method 3			
☐ Method 3A			
☐ Method 3C			

Check the Most Appropriate Answer and Fill in the Blanks.			
Regulation	40 CFR § 60.764 Test Methods and Procedures	Response	
(e)	Will the net heating value of the combusted landfill gas as determined in §60.18(f)(3) be calculated from the concentration of methane in the landfill gas as measured by Method 3C for the performance test required in §60.762(b)(2)(iii)(A)?	☐ YES ☐ NO	
If NO, attach detailed	explanation.		
organic components,	three 30-minute Method 3C samples are determined. The measurement hydrogen, and carbon monoxide is not applicable. Method 3C may be gas molecular weight for calculating the flare gas exit velocity under §	e used to	
Note: Within 60 days after the date of completing each performance test (as defined in §60.8), the owner or operator must submit the results of the performance tests, including any associated fuel analyses, required by §60.764(b) or (d) according to §60.767(i)(1).			
Regulation	40 CFR § 60.765 Compliance Provisions	Response	
(a)	Does the gas collection and control system (GCCS) design plan include any alternatives to the compliance measures of § 60.765?	☐ YES ☐ NO	
If YES, attach a detai	led explanation.		
	he methods specified in (a)(1) through (a)(6) below to determine whet a compliance with § 60.762(b)(2)(ii).	ther the gas	
(a)(1)	Are you calculating the maximum expected gas generation flow rate from the landfill to determine compliance with § 60.762(b)(2)(ii)(C)(1)?	☐ YES ☐ NO	
If YES, use one of the	e following equations, (a)(1)(i) or (a)(1)(ii).		
If NO, attach a detailed explanation.			
Note: The k and L_o kinetic factors should be those published in the most recent Compilation of Air Pollutant Emission Factors (AP–42) or other site-specific values demonstrated to be appropriate and approved by the Agency. If k has been determined as specified in § $60.764(a)(4)$, the value of k determined from the test shall be used. A value of no more than 15 years shall be used for the intended use period of the gas mover equipment. The active life of the landfill is the age of the landfill plus the estimated number of years until closure.			

Check the Most Appropriate Answer and Fill in the Blanks.			
Regulation	40 CFR § 60.765 Compliance Provisions	Response	
(a)(1)(i)	Did you calculate the maximum expected gas generation flow rate using the following equation for sites with an unknown year-to-year solid waste acceptance rate?	☐ YES ☐ NO	
Q _m = 2L _o R (e ^{-kc} - e ^{-kt}) where: Q _m =maximum expected gas generation flow rate, cubic meters per year L _o =methane generation potential, cubic meters per megagram solid waste R = average annual acceptance rate, megagrams per year k = methane generation rate constant, year ¹ t = age of the landfill at equipment installation plus the time the owner or operator intends to use the gas mover equipment or active life of the landfill, whichever is less. If the equipment is installed after closure, t is the age of the landfill at installation, years c = time since closure, years (for active landfill c=0 and e ^{-kc} = 1)			
(a)(1)(ii)	Did you calculate the maximum expected gas generation flow rate using the following equation for sites with a known year-to-year solid waste acceptance rate?	☐ YES ☐ NO	
n Q _M = Σ2 k L _o M _i (e ^{-kt} _i) i=1 where, Q _M =maximum expected gas generation flow rate, cubic meters per year k = methane generation rate constant, year ¹ L _o = methane generation potential, cubic meters per megagram solid waste M _i = mass of solid waste in the 1 st section, megagrams t _i = age of the 1 st section, years			
(a)(1)(iii)	Has a gas collection and control system already been installed?	☐ YES ☐ NO	
If NO, skip to (a)(2) be	elow.		
(a)(1)(iii)	Did you use actual flow data to project the maximum expected gas generation flow rate instead of, or in conjunction with, the equations in (a)(1)(i) and (a)(1)(ii) above?	☐ YES ☐ NO	
If YES, attach a detailed explanation.			
Note: If the landfill is still accepting waste, the actual measured flow data will not equal the maximum expected gas generation rate, so calculations using the equations in paragraphs (a)(1)(i) or (a)(1)(ii) or other methods shall be used to predict the maximum expected gas generation rate over the intended period of use of the gas control system equipment.			

Check the Most Appropriate Answer and Fill in the Blanks.			
Regulation	40 CFR § 60.765 Compliance Provisions	Response	
(a)(2)	Are you seeking to demonstrate compliance with the provision of § 60.762(b)(2)(ii)(C)(2) for sufficient density of gas collectors?	☐ YES ☐ NO	
If NO, attach a detailed	d explanation.		
(a)(2)	Does the GCCS design plan include a system of vertical wells, horizontal collectors, or other collection devices, satisfactory to the Agency, capable of controlling and extracting gas from all portions of the landfill sufficient to meet all operational and performance standards?	☐ YES ☐ NO	
(a)(3)	Are you seeking to demonstrate compliance with the provision of § 60.762(b)(2)(ii)(C)(3) for sufficient gas collection system flow rate?	☐ YES ☐ NO	
If NO, attach a detaile	d explanation.		
(a)(3)	Will you measure gauge pressure in the gas collection header at each individual well each month?	☐ YES ☐ NO	
(a)(3)	Will you initiate action to correct the positive pressure within 5 calendar days, except for the three conditions allowed under § 60.763(b), if a positive pressure exists?	☐ YES ☐ NO	
If NO, attach a detailed explanation.			
Note: Any attempted standards.	corrective measure shall not cause exceedances of other operationa	l or performance	
(a)(3)(i)	If negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement of positive pressure, will you conduct a root cause analysis and correct the exceedance as soon as practicable, but no later than 60 days after positive pressure was first measured?	☐ YES ☐ NO	
Note: The owner or operator must keep records according to §60.768(e)(3).			
(a)(3)(ii)	If corrective actions cannot be fully implemented within 60 days following the positive pressure measurement for which the root cause analysis was required, will you conduct a corrective action analysis and develop an implementation schedule to complete the corrective action(s) as soon as practicable, but no more than 120 days following the positive pressure measurement?	☐ YES ☐ NO	

Check the Most Appropriate Answer and Fill in the Blanks.				
Regulation	40 CFR § 60.765 Compliance Provisions	Response		
Note: The owner or operator must submit the items listed in $\S60.767(g)(7)$ as part of the next annual report. The owner or operator must keep records according to $\S60.768(e)(4)$.				
(a)(3)(iii)	If corrective actions are expected to take longer than 120 days to complete after the initial exceedance, will you submit the root cause analysis, corrective action analysis, and corresponding implementation timeline to the Administrator, according to §60.767(g)(7) and §60.767(j)?	☐ YES ☐ NO		
Note: The owner or o	perator must keep records according to §60.768(e)(5).			
Note: Paragraph (a)(4	4) has been intentionally left blank in this section. Please move on to	(a)(5).		
(a)(5)	Are you seeking to identify whether excess air infiltration into the landfill is occurring?	☐ YES ☐ NO		
If NO, attach a detailed	d explanation.			
(a)(5)	Will you monitor each well monthly for temperature as provided in § 60.763(c)?	☐ YES ☐ NO		
(a)(5)	Will you take the following correction action(s) if any well exceeds one or more of the limits for these operating parameters?	☐ YES ☐ NO		
initiate action to	correct the exceedance within 5 calendar days			
any attempted co	prrective measure shall not cause exceedances of other operational	or performance		
(a)(5)(i)	If landfill gas temperature of < 55 °C cannot be achieved within 15 days of first measurement of gas temperature > 55 °C, will a root cause analysis be conducted, and the exceedance corrected no later than 60 days after first temperature measurement > 55°C?	☐ YES ☐ NO		
Note: Records must b	e kept according to §60.768(e)(3).			
(a)(5)(ii)	If corrective action cannot be implemented within 60 days of positive pressure measurement, will a corrective action analysis be conducted, and an implementation schedule developed to complete corrective action no later than 120 days following initial measurement of > 55° C?	☐ YES ☐ NO		
Note : Items listed in §60.767(g)(7) must be submitted as part of next annual report. Records must be kept according to §60.768(e)(4).				
(a)(5)(iii)	If corrective action is expected to take > 120 days, will a root cause analysis, corrective action analysis, and corresponding implementation timeline be submitted to the Administrator, according to §60.767(g)(7) and §60.767(j)?	☐ YES ☐ NO		

Check the Most Appropriate Answer and Fill in the Blanks.			
Regulation	40 CFR § 60.765 Compliance Provisions	Response	
Note: Records must be kept according to §60.768(e)(5).			
(a)(6)	Are you seeking to demonstrate compliance with § 60.762(b)(2)(ii)(C)(4) through the use of a collection system not conforming to the specifications provided in § 60.769?	☐ YES ☐ NO	
If NO, skip to (b) belo	w.		
(a)(6)	Have you provided information satisfactory to the Agency as specified in § 60.767(c)(3) which demonstrates that off-site migration is being controlled?	☐ YES ☐ NO	
If YES, attach the rele	evant information to this checklist.		
(b)	Are you seeking to comply with the provisions of § 60.763(a)?	☐ YES ☐ NO	
If NO, attach a detaile	ed explanation.		
(b)	Have you placed each well or design component as specified in the approved GCCS design plan as provided in § 60.767(c)?	☐ YES ☐ NO	
(b)	Was each well installed no later than 60 days after the date on which the initial solid waste has been in place for the period(s) specified below?	☐ YES ☐ NO	
☐ 5 years or more	if active		
☐ 2 years or more	if closed or at final grade		
(c)	Are you seeking to demonstrate compliance with the surface methane operational standard as provided in § 60.763(d)?	☐ YES ☐ NO	
If NO, attach a detaile	ed explanation.		
(c)(1)	Will you monitor surface concentrations of methane along the entire perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals (or a site-specific established spacing) for each collection area on a quarterly basis using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in paragraph (d) below?	☐ YES ☐ NO	
Note: This requireme	ent applies after installation of the collection system.		
(c)(2)	Will you determine the background concentration by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells?	☐ YES ☐ NO	
(c)(3)	Will monitoring of surface emissions be performed in accordance with section 8.3.1 of Method 21 of Appendix A, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground?	☐ YES ☐ NO	

Check the Most Appropriate Answer and Fill in the Blanks.			
Regulation		40 CFR § 60.765 Compliance Provisions	Response
Note: Monitoring	g sha	all be performed during typical meteorological conditions.	
(c)(4)		Will any reading of 500 parts per million or more above background at any location be recorded as a monitored exceedance?	☐ YES ☐ NO
(c)(4)		Will the following actions be taken when a monitored exceedance occurs?	☐ YES ☐ NO
☐ The locatio	n of	each monitored exceedance shall be marked, and the location record	ed.
the vicinity	Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each exceedance shall be made and the location shall be re-monitored within 10 calendar days of detecting the exceedance.		
taken, and re-monitori	If the re-monitoring of the location shows a second exceedance, additional corrective action shall be taken, and the location shall be monitored again within 10 days of the second exceedance. If the re-monitoring shows a third exceedance for the same location, the action specified in paragraph (c)(4)(v) of this section shall be taken, and no further monitoring of that location is required until the action specified in paragraph (c)(4)(v) has been taken.		
methane al this section shows a co location is l	Any location that initially showed an exceedance but has a methane concentration less than 500 ppm methane above background at the 10-day re-monitoring specified in paragraph (c)(4)(ii) or (c)(4)(iii) of this section shall be re-monitored 1 month from the initial exceedance. If the 1-month re-monitoring shows a concentration less than 500 parts per million above background, no further monitoring of that location is required until the next quarterly monitoring period. If the 1-month re-monitoring shows an exceedance, the actions specified in paragraph (c)(4)(iii) or (c)(4)(v) shall be taken.		
background	For any location where monitored methane concentration equals or exceeds 500 parts per million above background three times within a quarterly period, a new well or other collection device shall be installed within 120 calendar days of the initial exceedance.		
Note: As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of § 60.763(d).			
		remedy to the exceedance, such as upgrading the blower, header pip conding timeline for installation may be submitted to the Agency for ap	
(c)(5)		Have you implemented a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis?	☐ YES ☐ NO

Check the Most Appropriate Answer and Fill in the Blanks.			
Regulation	40 CFR § 60.765 Compliance Provisions	Response	
If NO, attach a detailed explanation			
(d)	Are you seeking to comply with the provisions of § 60.765(c) or §60.764(a)(6) for instrumentation specifications and procedures for surface emission monitoring?	☐ YES ☐ NO	
	nce with the instrumentation specifications and procedures for surface answering questions (d)(1) through (d)(4) below.	e emission	
If NO, attach a detaile	d explanation.		
(d)(1)	Will the portable analyzer meet the instrument specifications provided in section 6 of Method 21 of Appendix A, except that "methane" shall replace all references to VOC?	☐ YES ☐ NO	
(d)(2)	Will the calibration gas be methane, diluted to a nominal concentration of 500 parts per million in air?	☐ YES ☐ NO	
If NO, attach a detaile	d explanation.		
(d)(3)	Will the instrument evaluation procedures of section 8.1 of Method 21 of Appendix A be used to meet the performance evaluation requirements in section 8.1 of Method 21 of Appendix A?	☐ YES ☐ NO	
If NO, attach a detaile	d explanation.		
(d)(4)	Will the calibration procedures provided in sections 8 and 10 of Method 21 of Appendix A be followed immediately before commencing a surface monitoring survey?	☐ YES ☐ NO	
If NO, attach a detailed explanation.			
(e)	Will you comply with the provisions of § 60.765 at all times, including periods of start-up, shutdown, and malfunction?	☐ YES ☐ NO	
Note: During periods of start-up, shutdown, and malfunction, work practice specified in §60.763(e) shall be complied with in lieu of the compliance provisions in §60.765.			
If NO, attach a detailed explanation.			

Check the Most Appropriate Answer and Fill in the Blanks.			
Regulation	40 CFR § 60.766 Monitoring of Operations	Response	
Does the gas collection and control system (GCCS) design plan include any alternatives to the monitoring provisions of § 60.766?		☐ YES ☐ NO	
If YES, attach a detaile	ed explanation.		
(a)	Will this landfill have an active gas collection system which complies with § 60.762(b)(2)(ii)(C)?	☐ YES ☐ NO	
If NO, attach an explar	nation and skip to (b) below.		
(a)	Will a sampling port and a thermometer, other temperature measuring device, or an access port for temperature measurement be installed at each wellhead?	☐ YES ☐ NO	
If NO, attach a detailed	d explanation.		
(a)(1)	Will the gauge pressure in the gas collection header be measured on a monthly basis as provided in § 60.765(a)(3)?	☐ YES ☐ NO	
If NO, attach a detailed	d explanation.		
(a)(2)	Will the nitrogen or oxygen concentration in the landfill gas be monitored on a monthly basis ?	☐ YES ☐ NO	
If NO, attach a detailed	d explanation.		
(a)(2)(i)	Will the nitrogen level be determined using Method 3C, unless an alternative test method is established as allowed by §60.767(c)(2)?	☐ YES ☐ NO	
(a)(2)(ii)	Unless an alternative test method is established as allowed by §60.767(c)(2), will the oxygen level be determined by an oxygen meter using Method 3A, 3C, or ASTM D6522-11, except for the following?	☐ YES ☐ NO	
☐ Span must be se	t between 10 and 12 percent oxygen.		
Data recorder is	not required.		
☐ Two calibration g	ases are required, a zero and span.		
☐ Calibration error check is not required.			
Allowable sample bias, zero drift, and calibration drift are ± 10 percent.			
If NO, attach a detailed explanation.			
(a)(2)(iii)	Will a portable gas composition analyzer be used to monitor the oxygen levels provided the analyzer is calibrated and it meets all quality control requirements for Method 3A or ASTM D6522-11?	☐ YES ☐ NO	

Check the Most Appropriate Answer and Fill in the Blanks.				
Regulation	40 CFR § 60.766 Monitoring of Operations	Response		
If NO, attach a detaile	If NO, attach a detailed explanation.			
(a)(3)	Will the temperature of the landfill gas be monitored on a monthly basis as provided in § 60.765(a)(5)?	☐ YES ☐ NO		
Note: Temperature me appendix A-1, Method	easuring device must be calibrated annually using the procedure in 4 / 2, Section 10.3.	0 CFR part 60,		
If NO, attach a detaile	d explanation.			
(b)	Will this landfill have an enclosed combustor which complies with § 60.762(b)(2)(iii)?	☐ YES ☐ NO		
If NO, skip to (c) below	V.			
(b)	Will the equipment listed in (b)(1) and (b)(2) below be calibrated, maintained, and operated according to the manufacturer's specifications?	☐ YES ☐ NO		
If NO, attach a detaile	d explanation.			
(b)(1)	Will the temperature monitoring device be equipped with a continuous recorder and have a minimum accuracy of ±1% of the temperature being measured expressed in degrees Celsius, or ±0.5 degrees Celsius, whichever is greater?	☐ YES ☐ NO		
	monitoring device is not required for boilers or process heaters with coor equal to 44 megawatts.	lesign heat input		
If NO, attach a detaile	d explanation.			
(b)(2)	Will a device be used to record flow to or bypass of the control device?	☐ YES ☐ NO		
If NO, attach a detaile	d explanation.			
(b)(2)(i)	Will a gas flow rate measuring device that records the flow to the control device at least every 15 minutes be installed, calibrated, and maintained?	☐ YES ☐ NO		
If NO, attach a detailed explanation.				
(b)(2)(ii)	The bypass line valve must be secured in the closed position with a car-seal or a lock-and-key type configuration?	☐ YES ☐ NO		
(b)(2)(ii)	Will a visual inspection of the seal or closure mechanism be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line?	☐ YES ☐ NO		

Check the Most Appropriate Answer and Fill in the Blanks.			
Regulation	40 CFR § 60.766 Monitoring of Operations	Response	
If NO, attach a detailed	d explanation.		
(c)	Will this landfill have an open flare which complies with § 60.762(b)(2)(iii) that is, § 60.18?	☐ YES ☐ NO	
If NO, skip to (d) below	V.		
(c)	Will the equipment listed in (c)(1) and (c)(2) below be calibrated, maintained, and operated according to the manufacturer's specifications?	☐ YES ☐ NO	
If NO, attach a detailed	d explanation.		
(c)(1)	Will a heat sensing device, such as an ultraviolet beam sensor or thermocouple, be used at the pilot light or the flame itself to indicate the continuous presence of a flame?	☐ YES ☐ NO	
If NO, attach a detailed explanation.			
(c)(2)	Will a device be used to record flow to or bypass of the flare?	☐ YES ☐ NO	
If NO, attach a detailed explanation.			
(c)(2)(i)	Will a gas flow rate measuring device that records the flow to the control device at least every 15 minutes be installed, calibrated, and maintained?	☐ YES ☐ NO	
If NO, attach a detailed	d explanation.		
(c)(2)(ii)	Will the bypass line valve be secured in the closed position with a car-seal or a lock-and-key type configuration?	☐ YES ☐ NO	
If NO, attach a detailed	d explanation.		
(c)(2)(ii)	Will a visual inspection of the seal or closure mechanism be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line?	☐ YES ☐ NO	
If NO, attach a detailed explanation.			
(d)	Will this landfill seek to demonstrate compliance with §60.762(b)(2)(iii) using a control device other than an open flare, an enclosed combustor, or a treatment system?	☐ YES ☐ NO	
If YES, submit the con to construction.	trol device's engineering design and operational parameters for Ager	ncy approval prior	

Check the Most Appropriate Answer and Fill in the Blanks.		
Regulation	40 CFR § 60.766 Monitoring of Operations	Response
If NO, skip to (e) below	w.	
(d)	Does the GCCS design plan include information describing the operation of the control device, the operating parameters that would indicate proper performance, and appropriate monitoring procedures?	☐ YES ☐ NO
	ill review the information and either approve it, or request that addition by also may specify additional appropriate monitoring procedures.	aal information be
(e)	Are you seeking to install a collection system that does not meet the specifications in § 60.769 or seeking to monitor alternative parameters to those required by § 60.763 through § 60.766?	☐ YES ☐ NO
If NO, skip to (f) below.		
(e)	Does the GCCS design plan include information describing the design and operation of the collection system, the operating parameters that would indicate proper performance, and appropriate monitoring procedures?	YES NO
Note: The Agency may specify additional appropriate monitoring procedures.		
If NO, attach a detaile	d explanation.	
(f)	Are you seeking to demonstrated compliance with the 500 parts per million surface methane operational standard in §60.763(d)?	☐ YES ☐ NO
If NO, skip to (g) below	w.	
(f)	Are surface concentrations of methane monitored according to the procedures in §60.765(c) and the instrument specifications in §60.765(d)?	☐ YES ☐ NO
If NO, attach a detailed explanation.		
Note: Any closed landfill that has no monitored exceedances of the operational standard in three consecutive quarterly monitoring periods may skip to annual monitoring. Any methane reading of 500 ppm or more above background detected during the annual monitoring returns the frequency for that landfill to quarterly monitoring.		

Check the Most Appropriate Answer and Fill in the Blanks.			
Regulation	40 CFR § 60.766 Monitoring of Operations	Response	
(g)	Are you seeking to demonstrated compliance with §60.762(b)(2)(iii) using a landfill gas treatment system?	☐ YES ☐ NO	
If NO, skip to (h) belo	w.		
(g)	Will you maintain and operate all monitoring systems associated with the treatment system in accordance with the site-specific treatment system monitoring plan required in §60.768(b)(5)(ii) and calibrate, maintain, and operate according to the manufacturer's specifications a device that records flow to the treatment system and bypass of the treatment system?	☐ YES ☐ NO	
If NO, attach a detaile	ed explanation.		
(g)(1)	Will you install, calibrate, and maintain a gas flow rate measuring device that records the flow to the treatment system at least every 15 minutes?	☐ YES ☐ NO	
If NO, attach a detaile	If NO, attach a detailed explanation.		
(g)(2)	Will the bypass line valve be secured in the closed position with a car-seal or a lock-and-key type configuration?	☐ YES ☐ NO	
(g)(2)	Will a visual inspection of the seal or closure mechanism must be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line?	☐ YES ☐ NO	
If NO, attach a detaile	ed explanation.		
(h)	Will you meet the monitoring requirements of paragraphs (b), (c) (d) and (g) of this section at all times the affected source is operating, except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities?	☐ YES ☐ NO	
If NO, attach a detailed explanation.			
Note: A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. You are required to complete monitoring system repairs in response to monitoring system malfunctions and to return the monitoring system to operation as expeditiously as practicable.			

Check the Most Appropriate Answer and Fill in the Blanks.			
Regulation	40 CFR § 60.767 Reporting Requirements	Response	
Does the gas collection to the reporting provis	on and control system (GCCS) design plan include any alternatives ions of § 60.767?	☐ YES ☐ NO	
If YES, attach a detailed explanation.			
(a)	Are you submitting a design capacity report?	☐ YES ☐ NO	
If YES and you are su	bmitting an amended design capacity report, skip to (a)(3) below.		
If YES and you are su	bmitting an initial design capacity report, continue.		
If NO, skip to (b) below.			
(a)(1)(i) (a)(1)(ii)	On what date did construction, modification, or reconstruction of this commence?	landfill	
MM/DD/YYYY:			
Note: If this date is after July 17, 2014 but before August 29, 2016, the initial design capacity report was due no later than November 28, 2016.			
Note: If this date is after August 29, 2016, the initial design capacity report was (or is) due within ninety (90) days after the date on which construction, modification, or reconstruction commenced.			
(a)(1)(i) (a)(1)(ii)	On what date did you submit the initial design capacity report?		
MM/DD/YYYY:			
` '` '`	Does the initial design capacity report contain a map or plot of the landfill?	☐ YES ☐ NO	
Note: The map or plot must provide the size and location of the landfill and identify all areas where solid waste may be landfilled according to the permit issued by the State, local, or tribal agency responsible for regulating the landfill.			

Check the Most Appropriate Answer and Fill in the Blanks			
Regulation	40 CFR § 60.767 Reporting Requirements	Response	
(a)(2)(ii)	Does the initial design capacity report contain the maximum design capacity of the landfill?	☐ YES ☐ NO	
Note: Where the maximum design capacity is specified in the permit issued by the State, local, or tribal agency responsible for regulating the landfill, a copy of the permit specifying the maximum design capacity may be submitted as part of the report. If the maximum design capacity of the landfill is not specified in the permit, the maximum design capacity shall be calculated using good engineering practices. The calculations shall be provided, along with the relevant parameters as part of the report. The landfill may calculate design capacity in either megagrams or cubic meters for comparison with the exemption values. If the owner or operator chooses to convert the design capacity from volume to mass or from mass to volume to demonstrate its design capacity is less than 2.5 million megagrams or 2.5 million cubic meters, the calculation must include a site-specific density, which must be recalculated annually. Any density conversions must be documented and submitted with the design capacity report. The State, Tribal, or local agency may request other reasonable information as may be necessary to verify the maximum design capacity of the landfill.			
Attach the Initial Designation	gn Capacity Report Submittal Form to the Report and submit as instru	cted.	
If NO, attach a detaile	ed explanation.		
(a)(3)	Are you submitting an amended design capacity report?	☐ YES ☐ NO	
If YES, continue. Attach the Amended Design Capacity Report Submittal Form to the Report and submit as instructed.			
If NO, skip to (b) below	w and attach a detailed explanation.		
Note: The report must be submitted within 90 days of an increase in the maximum design capacity of the landfill to or above 2.5 million megagrams and 2.5 million cubic meters.			
(a)(3)	What is the increased maximum design capacity being reported?		
	megagrams	million m³	
Note: This increase in design capacity may result from an increase in the permitted volume of the landfill or an increase in the density as documented in the annual recalculation required in § 60.768(f).			
(b)	Are you submitting an NMOC emission rate report?	☐ YES ☐ NO	

Check the Most Appropriate Answer and Fill in the Blanks				
Regulation	40 CFR § 60.767 Reporting Requirements	Response		
If NO, skip to (b)(3) b	If NO, skip to (b)(3) below.			
(b)(1)	What type of NMOC emission rate report are you submitting?			
initial initial				
Annual				
5-year estimate	e in lieu of an annual report			
Note: If the estimated NMOC emission rate as reported in the annual report to the Agency is less than 34 megagrams per year in each of the next 5 consecutive years, the owner or operator may elect to submit an estimate of the NMOC emission rate for the next 5-year period in lieu of the annual report.				
Attach NMOC Emiss	ion Report Submittal Form and submit as instructed.			
(b)(1)	Which formulas and procedures were used to calculate the NMOC emreport?	ission rate in this		
S 60.764(a)				
§ 60.764(b)				
(b)(1)(i)	Is the initial NMOC emission rate report combined with the initial desig or submitted as a separate report?	n capacity report		
combined repo	rt			
separate report				
(b)(1)(i)(A)	On what date did construction, modification, or reconstruction of this la	indfill commence?		
MM/DD/YYYY:				
Note: If this date is after July 17, 2014, but before August 29, 2016, the initial NMOC emission rate report was due no later than November 28, 2016.				
Note: If this date is after August 29, 2016, the initial NMOC emission rate report was (or is) due within ninety (90) days after the date on which construction, modification, or reconstruction commenced.				
(b)(1)(i)	On what date did you submit the initial NMOC emission rate report?			
MM/DD/YYYY:				
Note: Subsequent re	eports must be submitted annually thereafter.			
(b)(1)(ii)	If you are submitting a 5-year estimate, what is the 5-year period cove	red by the report?		
MM/DD/YYYY:	to			

Check the Most Appropriate Answer and Fill in the Blanks			
Regulation	40 CFR § 60.767 Reporting Requirements	Response	
Note: This estimate shall be revised at least once every 5 years. If the actual waste acceptance rate exceeds the estimated waste acceptance rate in any year reported in the 5-year estimate, a revised 5-year estimate shall be submitted to the Agency. The revised estimate shall cover the 5-year period beginning with the year in which the actual waste acceptance rate exceeded the estimated waste acceptance rate.			
(b)(2)	Does the NMOC emission rate report include all the data, calculations, sample reports and measurements used to estimate the annual or 5-year emissions?	☐ YES ☐ NO	
and the estimated was	5-year estimate, the estimate shall include the current amount of solid te acceptance rate for each year of the 5 years for which an NMOC of dicalculations upon which this estimate is based shall be provided to	emission rate is	
Note: The Agency ma NMOC emission rate.	ay request such additional information as may be necessary to verify	the reported	
If NO, attach a detailed	d explanation.		
(b)(3)	Are you claiming exemption from the requirements of paragraphs (b)(1) and (b)(2) of this section?	☐ YES ☐ NO	
If NO, skip to (c) below	1.		
(b)(3)	Has a gas collection and control system for compliance with § 60.762(b)(2) been installed?	☐ YES ☐ NO	
If NO, attach a detailed	d explanation.		
(b)(3)	Has the gas collection and control system been in operation and in compliance with §§ 60.763 and 60.765 during the period for which you claim exemption from the requirements of (b)(1) and (b)(2)?	☐ YES ☐ NO	
If NO, attach a detailed	d explanation.		
(c)	Are you submitting a gas collection and control system design plan that was prepared and approved by a professional engineer?	☐ YES ☐ NO	
If YES, Attach Gas Co	llection and Control System Design Plan Submittal Form and submit	as instructed.	
If NO, attach a detailed	d explanation.		
(c)(1)	Does the collection and control system as described in the design plan meet the design requirements in §60.762(b)(2)?	☐ YES ☐ NO	
If NO, attach a detailed explanation.			
(c)(2)	Does the design plan include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions of §§60.763 through 60.768?	YES NO	

Check the Most Appropriate Answer and Fill in the Blanks			
Regulation	40 CFR § 60.767 Reporting Requirements	Response	
If NO, attach a detaile	d explanation.		
(c)(3)	Does the design plan conform with specifications for active collection systems in §60.769 or include a demonstration to the Administrator's satisfaction of the sufficiency of the alternative provisions to §60.769?	☐ YES ☐ NO	
If NO, attach a detaile	d explanation.		
(c)(4)	Has a collection and control system design plan been submitted to the Administrator for approval within 1 year of the first NMOC emission rate report in which the NMOC emission rate equals or exceeds 34 megagrams per year or meets the following requirement?	☐ YES ☐ NO	
If NMOC emission rate is recalculated as provided in §60.764(a)(3) and is less than 34 megagrams per year, annual periodic reporting must be resumed, using the Tier 2 determined site-specific NMOC concentration, until the calculated emission rate is equal to or greater than 34 megagrams per year or the landfill is closed			
Note: Revised NMOC emission rate report, with the recalculated emission rate based on NMOC sampling and analysis, must be submitted, following the procedures in paragraph (i)(2) of this section, within 180 days of the first calculated exceedance of 34 megagrams per year			
	on rate is recalculated as provided in §60.764(a)(4) and is less than 3 iodic reporting must be resumed.	4 megagrams per	
Note: The resulting site-specific methane generation rate constant k must be used in the emission rate calculation until such time as the emissions rate calculation results in an exceedance. The revised NMOC emission rate report based on the provisions of §60.764(a)(4) and the resulting site-specific methane generation rate constant k must be submitted, following the procedure specified in paragraph (i)(2) of this section, to the Administrator within 1 year of the first calculated emission rate equaling or exceeding 34 megagrams per year.			

Check the Most Appropriate Answer and Fill in the Blanks		
Regulation	40 CFR § 60.767 Reporting Requirements	Response
based on the pr surface emissio	urface methane emissions are demonstrated to be below 500 parts per rovisions of §60.764(a)(6), then the owner or operator must submit annulars report as specified in this paragraph following the procedure specified tion until a surface emissions readings of 500 parts per million methane	ally a Tier 4 d in paragraph
methane or greater for reduce Tier 4 monitor additional information The Tier 4 surface en average wind speeds methane or greater, of latitude and longitude must be in decimal de	rface emissions report shows no surface emissions readings of 500 part or four consecutive quarters at a closed landfill, then the landfill owner or ring from a quarterly to an annual frequency. The Administrator may required as may be necessary to verify the reported instantaneous surface emissions report must clearly identify the location, date and time (to neare a including wind gusts, and reading (in parts per million) of any value 500 other than non-repeatable, momentary readings. For location, you must be coordinates using an instrument with an accuracy of at least 4 meters. Regrees with at least five decimal places. The Tier 4 surface emission repetite most recent Tier 1 and Tier 2 results in order to verify that the landfill IMOC.	r operator may uest such ssion readings. est second), of parts per million determine the The coordinates port must also
Note: The initial Tier	4 surface emissions report must be submitted annually, starting within 3	0 davs of

Note: The initial Tier 4 surface emissions report must be submitted annually, starting within 30 days of completing the fourth quarter of Tier 4 surface emissions monitoring that demonstrates that site-specific surface methane emissions are below 500 parts per million methane, and following the procedure specified in paragraph (i)(2) of this section.

Note: The Tier 4 surface emissions report must be submitted within 1 year of the first measured surface exceedance of 500 parts per million methane, following the procedure specified in paragraph (i)(2) of this section.

Check the Most Appropriate Answer and Fill in the Blanks			
Regulation	40 CFR § 60.767 Reporting Requirements	Response	
(c)(5)	Will you notify the Administrator that the design plan is completed and submit a copy of the plan's signature page.?	☐ YES ☐ NO	
Note: The Administrator has 90 days to decide whether the design plan should be submitted for review. If the Administrator chooses to review the plan, the approval process continues as described in paragraph (c)(6) of this section. However, if the Administrator indicates that submission is not required or does not respond within 90 days, the landfill owner or operator can continue to implement the plan with the recognition that the owner or operator is proceeding at their own risk. In the event that the design plan is required to be modified to obtain approval, the owner or operator must take any steps necessary to conform any prior actions to the approved design plan and any failure to do so could result in an enforcement action.			
If NO, attach a detailed	d explanation		
Note: As per (c)(6) of this section, upon receipt of an initial or revised design plan, the Administrator must review the information submitted under paragraphs (c)(1) through (3) of this section and either approve it, disapprove it, or request that additional information be submitted. Because of the many site-specific factors involved with landfill gas system design, alternative systems may be necessary. A wide variety of system designs are possible, such as vertical wells, combination horizontal and vertical collection systems, or horizontal trenches only, leachate collection components, and passive systems. If the Administrator does not approve or disapprove the design plan or does not request that additional information be submitted within 90 days of receipt, then the owner or operator may continue with implementation of the design plan, recognizing they would be proceeding at their own risk.			
(c)(7)	If the owner or operator chooses to demonstrate compliance with the emission control requirements of this subpart using a treatment system as defined in this subpart, will a site-specific treatment system monitoring plan be prepared as specified in §60.768(b)(5)?	☐ YES ☐ NO	
Attach the site-specific	treatment system monitoring plan.		
If NO, attach a detailed	d explanation.		
(d)	Is a revised design plan being submitted?	☐ YES ☐ NO	
If NO, move on to que	If NO, move on to question (e) below.		
(d)	Will a revised design plan be submitted at least 90 days before expanding operations to an area not covered by the previously approved design plan or prior to installing or expanding the gas collection system in a way that is not consistent with the design plan that was submitted to the Administrator according to paragraph (c) of this section?	☐ YES ☐ NO	

Check the Most Appropriate Answer and Fill in the Blanks			
Regulation	40 CFR § 60.767 Reporting Requirements	Response	
If NO, please provide a detailed explanation.			
(e)	Are you submitting a closure report?	☐ YES ☐ NO	
If YES, the report must be submitted to the Agency within 30 days of waste acceptance cessation. Attach Closure Report to the Closure Report Submittal Form and submit as instructed.			
If NO, skip to (f) below	v.		
(e)	What is the date of waste acceptance cessation?		
MM/DD/YYYY:			
	port has been submitted to the Agency, no additional wastes may be publication of modification as described under § 60.7(a)(4).	laced into the	
	Has a permanent closure taken place in accordance with the requirements of 40 CFR § 258.60?	☐ YES ☐ NO	
Note: The Agency m	ay request additional information to verify permanent closure.		
If NO, attach a detaile	ed explanation.		
(f)	Are you submitting a Control Equipment Removal Report?	☐ YES ☐ NO	
If YES, the report must be submitted to the Agency 30 days prior to removal or cessation of operation of the control equipment.			
If NO, skip to (g) below	w.		
(f)	What is the date on which the control equipment will be removed or voperation?	vill cease	
MM/DD/YYYY:			
☐ removal			
cease operation	cease operation		
` ' ` '	Does the Equipment Removal Report contain all of the following items?	☐ YES ☐ NO	

Chec	Check the Most Appropriate Answer and Fill in the Blanks				
Regu	Regulation 40 CFR § 60.767 Reporting Requirements Response				
	a copy of the	closure report submitted in accordance with paragraph (e) of this section	า		
	a copy of the initial performance test report demonstrating that the 15-year minimum control period has expired, unless the report of the results of the performance test has been submitted to the EPA via the EPA's CDX, or information that demonstrates that the GCCS will be unable to operate for 15 years due to declining gas flows				
such	performance t	nent removal report, the process unit(s) tested, the pollutant(s) tested, as est was conducted may be submitted in lieu of the performance test rep of submitted to the EPA's CDX			
	dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 34 megagrams or greater of NMOC per year, unless the NMOC emission rate reports have been submitted to the EPA via the EPA's CDX				
the N subn	Note: If the NMOC emission rate reports have been previously submitted to the EPA's CDX, a statement that the NMOC emission rate reports have been submitted electronically and the dates that the reports were submitted to the EPA's CDX may be submitted in the equipment removal report in lieu of the NMOC emission rate reports.				
		may request such additional information as may be necessary to verify val in $\S 60.762(b)(2)(v)$ have been met.	that all of the		
	h Control Equi	oment Removal Report to the Control Equipment Removal Report Subr l.	nittal Form and		
(g)		Are you submitting an Annual Report of recorded information for an active gas collection system as specified in § 60.767(g)(1) through § 60.767(g)(7)?	☐ YES ☐ NO		
If NO	, skip to (h) be	low.			
(g)		What is the date of installation and start-up of the gas collection and	control system?		
MM/[MM/DD/YYYY:				
Note: The initial annual report shall be submitted within 180 days of installation and start-up of the gas collection and control system and shall include the initial performance test report required under § 60.8, unless the report of the results of the performance test has been submitted to the EPA via the EPA's CDX. In the initial annual report, the process unit(s) tested, the pollutant(s) tested, and the date that such performance test was conducted may be submitted in lieu of the performance test report if the report has been previously submitted to the EPA's CDX.					
(g)(1))-(g)(7)	Indicate below which types of recorded information are included in the report:	(g)(1)-(g)(7)		

Chec	Check the Most Appropriate Answer and Fill in the Blanks			
Regu	egulation 40 CFR § 60.767 Reporting Requirements Response			
	value and length of time for exceedance of applicable parameters monitored under § 60.766(a), § 60.766(b), § 60.766(c), § 60.656(d), and § 60.766(g)			
Note	: For enclosed co	ombustion devices and flares, reportable exceedances are defined u	nder § 60.768(c).	
		duration of all periods when the gas stream is diverted from the control through a bypass line or the indication of bypass flow as specified u		
	-	duration of all periods when the control device or treatment system wa e the control device or treatment system was not operating	as not operating	
	all periods when	the collection system was not operating		
		ach exceedance of the 500 parts per million methane concentration a the concentration recorded at each location for which an exceedance of the		
		ou must determine the latitude and longitude coordinates using an ins meters. The coordinates must be in decimal degrees with at least five		
		lation and the location of each well or collection system expansion ac 60.765(a)(5), § 60.765(b), and § 60.765(c)(4)	Ided pursuant to	
	the root cause analysis conducted, including a description of the recommended corrective action(s), the date for corrective action(s) already completed following the positive pressure reading, and, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates for any corrective action analysis for which corrective actions are required in §60.765(a)(3) or (5) and that take more than 60 days to correct the exceedance			
Attac	h Annual Report	to the Annual Report Submittal Form and submit as instructed.		
(h)		Are you submitting the Initial Performance Test Report required under § 60.8 for a gas collection and control system?	☐ YES ☐ NO	
If NO	, skip to the chec	klist for § 60.768 Recordkeeping Requirements.		
(h)(1))-(h)(6)	Does the Initial Performance Test Report include all of the following required information?	☐ YES ☐ NO	
	a diagram of the collection system showing collection system positioning including all wells, horizontal collectors, surface collectors, or other gas extraction devices, including the locations of any areas excluded from collection and the proposed sites for the future collection system expansion			
	the data upon which the sufficient density of wells, horizontal collectors, surface collectors, or other gas extraction devices and the gas mover equipment sizing are based			
	the documentation of the presence of asbestos or nondegradable material for each area from which collection wells have been excluded based on the presence of asbestos or nondegradable material			

Check the Most Appropriate Answer and Fill in the Blanks			
Regu	Regulation 40 CFR § 60.767 Reporting Requirements Response		
		as generation flow rates for all areas from which collection wells have oductivity and the calculations of gas generation flow rate for each ex	
		r increasing gas mover equipment capacity with increased gas gener mover equipment is inadequate to move the maximum flow rate expe	
	the provisions fo	r the control of off-site migration	
If NC), attach a detaile	d explanation	
(i)		Will you submit reports electronically according to paragraphs (i)(1) and (2) of this section?	☐ YES ☐ NO
(i)(1)		Will you submit the results of each performance test according to the following procedures within 60 days after the date of completing each performance test (as defined in §60.8)?	☐ YES ☐ NO
	on the EPA's ER must submit the Reporting Interface (https://cdx.epa.use of the EPA's schema listed or the performance submit a comple consistent with the CBI, on a compact electronic media Attention: Group NC 27703. The standard submit to the compact of the performance submit a comple consistent with the CBI, on a compact electronic media Attention: Group NC 27703. The standard submit to the compact of the	In the time of the performance test to the EPA's Electronic Reporting To the time of the performance test to the EPA via the Compliance and Elece (CEDRI). CEDRI can be accessed through the EPA's Central Datagov/). Performance test data must be submitted in a file format general ERT or an alternative file format consistent with the extensible marked in the EPA's ERT website, once the XML schema is available. If you contest information being submitted is confidential business information the file generated through the use of the EPA's ERT or an alternate elementary that the EPA's ERT or an alternate elementary that the EPA's ERT website, including information that the contest of the EPA's ERT website, including information that the contest of the EPA's ERT or an alternate elementary that the contest of the EPA's ERT or an alternate elementary that the contest of the EPA's ERT or an alternate elementary that the contest of the EPA's ERT or an alternate elementary that the contest of the EPA's ERT or an alternate elementary that the contest of the EPA's ERT or an alternate elementary that the contest of the EPA's ERT or an alternate elementary that the contest of the EPA's ERT or an alternate elementary that the contest of the EPA's ERT or an alternate elementary that the contest of the EPA's ERT or an alternate elementary that the contest of the EPA's ERT or an alternate elementary that the contest of the EPA's ERT or an alternate elementary that the EPA's ERT or an altern	e of the test, you missions Data a Exchange (CDX) ated through the up language (XML) laim that some of (CBI), you must ectronic file on claimed to be to the EPA. The RE CBI Office, ed., Durham,
	ERT website at t	ed using test methods that are not supported by the EPA's ERT as list the time of the test, you must submit the results of the performance te the appropriate address listed in §60.4.	

Check the Most Appropriate Answer and Fill in the Blanks			
Regu	ulation	40 CFR § 60.767 Reporting Requirements	Response
(i)(2)		If required to submit reports following the procedure specified in this paragraph, will the reports be submitted to the EPA via the CEDRI?	YES NO
alterr (<u>https</u> in CE at the the o subm	nate electronic file s://www3.epa.gov EDRI at the time to e appropriate add wner or operator	perator must use the appropriate electronic report in CEDRI for this se format consistent with the XML schema listed on the CEDRI website the consistent with the XML schema listed on the CEDRI website the thing of the control of the control of the control of the report is due, the owner or operator must submit the report to ress listed in §60.4. Once the form has been available in CEDRI for 9 must begin submitting all subsequent reports via CEDRI. The reports lines specified in this subpart, regardless of the method in which the lines specified in this subpart, regardless of the method in which the lines specified in this subpart, regardless of the method in which the lines specified in this subpart, regardless of the method in which the lines are considered.	e rt is not available the Administrator 00 calendar days, must be
If NO	, attach a detaile	d explanation	
(j)		For corrective actions, will you submit documents according to the following requirements?	☐ YES ☐ NO
	For corrective action that is required according to §60.765(a)(3)(iii) or (a)(5)(iii) and is expected to take longer than 120 days after the initial exceedance to complete, you must submit the root cause analysis, corrective action analysis, and corresponding implementation timeline to the Administrator as soon as practicable but no later than 75 days after the first measurement of positive pressure or temperature monitoring value of 55 degrees Celsius (131 degrees Fahrenheit). The Administrator must approve the plan for corrective action and the corresponding timeline.		
	For corrective action that is required according to §60.765(a)(3)(iii) or (a)(5)(iii) and is not completed within 60 days after the initial exceedance, you must submit a notification to the Administrator as soon as practicable but no later than 75 days after the first measurement of positive pressure or temperature exceedance.		
If NO	, attach a detaile	d explanation	
(k)		Will you employ a leachate recirculation or added liquids, based on a Research, Development, and Demonstration permit (issued through Resource Conservation and Recovery Act, subtitle D, part 258), within the last 10 years and submit to the Administrator, annually, following the procedure specified in paragraph (i)(2) of this section, the following information?	☐ YES ☐ NO
	Volume of leachate recirculated (gallons per year) and the reported basis of those estimates (records or engineering estimates).		
	Total volume of all other liquids added (gallons per year) and the reported basis of those estimates (records or engineering estimates).		

Check the Most Appropriate Answer and Fill in the Blanks				
Regulation	Regulation 40 CFR § 60.767 Reporting Requirements Response			
Surface a	Surface area (acres) over which the leachate is recirculated (or otherwise applied).			
☐ Surface a	ea (a	cres) over which any other liquids are applied.		
	on-sit	disposed (megagrams) in the areas with recirculated leachate and/or e records to the extent data are available, or engineering estimates an estimates.		
	ded lic	ste acceptance rates (megagrams per year) in the areas with recirculat quids, based on on-site records to the extent data are available, or eng		
initial annual re available in on- that commence containing data commenced co	Note: The initial report must contain items in paragraph (k)(1) through (6) of this section per year for the initial annual reporting period as well as for each of the previous 10 years, to the extent historical data are available in on-site records, and the report must be submitted no later than: September 27, 2017, for landfills that commenced construction, modification, or reconstruction after July 17, 2014 but before August 29, 2016 containing data for the first 12 months after August 29, 2016; or thirteen (13) months after the date of commenced construction, modification, or reconstruction for landfills that commence construction, modification, or reconstruction after August 29, 2016 containing data for the first 12 months after			
365-day period	follow	nnual reports must contain items in paragraph (k)(1) through (6) of this ving the 365-day period included in the previous annual report, and the an 365 days after the date the previous report was submitted.		
		cease annual reporting of items in paragraphs (k)(1) through (7) of this losure report in paragraph (e) of this section.	section once they	
If NO, attach a	letaile	ed explanation		
(1)		For Tier 4 notification, will you provide a notification of the date(s) upon which it intends to demonstrate site-specific surface methane emissions are below 500 parts per million methane, based on the Tier 4 provisions of §60.764(a)(6)?	☐ YES ☐ NO	
Note: The landfill must also include a description of the wind barrier to be used during the SEM in the notification. Notification must be postmarked not less than 30 days prior to such date.				
Note: If there is a delay to the scheduled Tier 4 SEM date due to weather conditions, including not meeting the wind requirements in §60.764(a)(6)(iii)(A), the owner or operator of a landfill shall notify the Administrator by email or telephone no later than 48 hours before any delay or cancellation in the original test date, and arrange an updated date with the Administrator by mutual agreement.				

Check the Most Appropriate Answer and Fill in the Blanks			
Regulation	40 CFR § 60.768 Recordkeeping Requirements	Response	
If NO, attach a detailed	d explanation		
Attach the Initial Perfo	rmance Test Report for the Control System Submittal Form and subn	nit as instructed.	
If performance testing	was waived under § 60.8(a)(4) attach a copy of the approval letter.		
(a)	Are you keeping (for at least 5 years) up-to-date, readily accessible, on-site records of the following?	☐ YES ☐ NO	
the design capac	city report which triggered § 60.762(b)		
the current amou	unt of solid waste in-place		
the year-by-year	waste acceptance rate		
Note: These records	are required if the calculated NMOC emission rate is ≥ 34 megagram	s per year.	
Note: Off-site records electronic formats are	may be maintained if they are retrievable within 4 hours. Either pape acceptable.	er copy or	
If NO, attach a detailed	d explanation		
(b)	Are you keeping up-to-date, readily accessible records of the control equipment data listed in paragraphs (b)(1) through (b)(5) below?	YES NO	
data measured of the control equip	luring the initial performance test or compliance determination will be ment	kept for the life of	
records of subse	quent tests or monitoring will be maintained for a minimum of 5 years	3	
records of the co	ntrol device vendor specifications shall be maintained until equipmen	t removal	
If NO, attach a detailed	d explanation.		
(b)(1)	Are you seeking to demonstrate compliance with § 60.762(b)(2)(ii) for a GCCS installation?	☐ YES ☐ NO	
If NO, skip to (b)(2) be	low.		
(b)(1)(i)	Are you keeping records of the maximum expected gas generation flow rate as calculated in § 60.765(a)(1)?	☐ YES ☐ NO	

Check the Most Appropriate Answer and Fill in the Blanks				
Regulation	40 CFR § 60.768 Recordkeeping Requirements	Response		
	Note: If you are using another agency-approved method to determine the maximum gas generation flow rate, attach a detailed explanation.			
If NO, attach a detaile	ed explanation.			
(b)(1)(ii)	Are you keeping records of the density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in § 60.769(a)(1)?	☐ YES ☐ NO		
If NO, attach a detaile	ed explanation.			
(b)(2)	Are you seeking to demonstrate compliance with § 60.762(b)(2)(iii), GCCS Control System, through use of an enclosed combustion device other than a boiler or process heater with a design heat input capacity ≥ 44 megawatts?	☐ YES ☐ NO		
If NO, skip to (b)(3) below.				
(b)(2)(i)	Are you keeping records of the average combustion temperature measured at least every 15 minutes and averaged over the same time period of the performance test?	☐ YES ☐ NO		
If NO, attach a detaile	ed explanation.			
(b)(2)(ii)	Are you keeping records of the percent reduction of NMOC achieved by the control device as determined by the method specified in § 60.762(b)(2)(iii)(B)?	☐ YES ☐ NO		
If NO, attach a detaile	ed explanation.			
(b)(3)	Are you seeking to demonstrate compliance with § 60.762(b)(2)(iii)(B)(1) through use of a boiler or process heater of any size?	☐ YES ☐ NO		
If NO, skip to (b)(4) be	elow.			
(b)(3)	Are you keeping a record of the description of the location at which the collected gas vent stream is introduced into the boiler or process heater over the same time period of the performance testing?	☐ YES ☐ NO		
If NO, attach a detaile	ed explanation.			
(b)(4)	Are you seeking to demonstrate compliance with § 60.762(b)(2)(iii)(A) through use of an open flare?	☐ YES ☐ NO		

Chec	Check the Most Appropriate Answer and Fill in the Blanks			
Regu	Regulation 40 CFR § 60.768 Recordkeeping Requirements Response			
If NO	If NO, skip to (b)(5) below.			
(b)(4))	Are you keeping the following required records?	☐ YES ☐ NO	
	flare type (i.e., s	team-assisted, air-assisted, or nonassisted)		
		ion readings, heat content determination, flow rate or bypass flow rate determinations made during the performance test as specified in \S 60		
		rds of the flare pilot flame or flare flame monitoring and records of all p ng which the pilot flame of the flare flame is absent	periods of	
If NO	, attach a detaile	ed explanation.		
(b)(5))	Are you seeking to demonstrate compliance with §60.762(b)(2)(iii) through use of a landfill gas treatment system?	☐ YES ☐ NO	
If NO	, skip to (c) belo	w.		
(b)(5) Are you keeping the following required records?		☐ YES ☐ NO		
	records of the flow of landfill gas to, and bypass of, the treatment system			
	monitoring records of parameters that are identified in the treatment system monitoring plan and that ensure the treatment system is operating properly for each intended end use of the treated landfill gas.			
		records should include records of filtration, de-watering, and compressionent system is operating properly for each intended end use of the trea	-	
	•	nods, frequencies, and operating ranges for each monitored operating r's recommendations or engineering analysis for each intended end us	-	
	documentation	of the monitoring methods and ranges, along with justification for their	use	
	identify who is re	esponsible (by job title) for data collection		
	processes and r	methods used to collect the necessary data		
	description of the procedures and methods that are used for quality assurance, maintenance, and repair of all continuous monitoring systems			
(c)		Are you keeping (for at least 5 years) up-to-date, readily accessible, records of the following?	☐ YES ☐ NO	
	continuous reco	rds of the equipment operating parameters specified to be monitored	in § 60.766	
	records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded			

Check the Most Appropriate Answer and Fill in the Blanks				
Regulation	Regulation 40 CFR § 60.768 Recordkeeping Requirements Response			
If NO, attach a detaile	ed explanation.			
(c)(1)	Are you keeping records of the following exceedances?	☐ YES ☐ NO		
Note: These exceed	ances should also be reported under § 60.767(g).			
≥ 44 megawatts more than 28 de	mbustors except for boilers and process heaters with design heat inputs, all 3-hour periods of operation during which the average combustion egrees C below the average combustion temperature during the most at which compliance with § 60.762(b)(2)(iii) was determined.	temperature was		
	ocess heaters, whenever there is a change in the location at which the the flame zone as required under paragraph (b)(3) of this section	vent stream is		
If NO, attach a detaile	ed explanation.			
(c)(2)	Are you keeping continuous records of the indication of flow to the control device or the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines, specified under § 60.766?	☐ YES ☐ NO		
If NO, attach a detaile	ed explanation.			
(c)(3)	Does the landfill use as a control device a boiler or process heater with a design heat input capacity ≥ 44 megawatts?	☐ YES ☐ NO		
If NO, skip to (c)(4) be	elow.			
(c)(3)	Are you keeping records of all periods of operation of the boiler or process heater?	☐ YES ☐ NO		
	could include records of steam use, fuel use, or monitoring data collect bal, or Federal regulatory requirements.	ted pursuant to		
If NO, attach a detaile	ed explanation.			
(c)(4)	Does the landfill use an open flare as a control device?	☐ YES ☐ NO		
If NO, skip to (d) below.				
(c)(4)	Are you keeping the following required records?	☐ YES ☐ NO		
continuous reco	continuous records of the flame or flare pilot flame monitoring specified under § 60.766(c)			
records of all periods of operation in which the flame or flare pilot flame is absent				

Check the Most Appropriate Answer and Fill in the Blanks			
Regu	ulation	40 CFR § 60.768 Recordkeeping Requirements	Response
If NC	, attach a detaile	ed explanation.	
(c)(5))	Does the landfill use an active collection system designed in accordance with § 60.762(b)(2)(ii)?	☐ YES ☐ NO
If NC	, skip to (d) belo	w.	
(c)(5))	Are you keeping records of periods when the collection system or control device is not operating?	☐ YES ☐ NO
If NC	, attach a detaile	ed explanation.	
(d)		Are you keeping for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector?	☐ YES ☐ NO
If NC	, attach a detaile	ed explanation.	
(d)(1)		Are you keeping up-to-date, readily accessible records of the installation date and location of all newly installed collectors as specified under § 60.765(b)?	☐ YES ☐ NO
If NC	, attach a detaile	ed explanation.	
(d)(2)	Are you keeping readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing or nondegradable waste excluded from collection as provided in § 60.769(a)(3)(i) as well as any nonproductive areas excluded from collection as provided in § 60.769(a)(3)(ii)?	☐ YES ☐ NO
If NC	, attach a detaile	ed explanation.	
(e)		Are you keeping (for at least 5 years) up-to-date, readily accessible records of the following?	☐ YES ☐ NO
	all collection and control system exceedances of the operational standards in § 60.763		
	the reading in the subsequent month whether or not the second reading is an exceedance		
	the location of each exceedance		
	each wellhead temperature monitoring value of 55 degrees Celsius (131 degrees Fahrenheit) or above, each wellhead nitrogen level at or above 20 percent, and each wellhead oxygen level at or above 5 percent		
	for any root cause analysis for which corrective actions are required in §60.765(a)(3)(i) or (a)(5)(i), keep a record of the root cause analysis conducted, including a description of the recommended corrective action(s) taken, and the date(s) the corrective action(s) were completed		

Check the Most Appropriate Answer and Fill in the Blanks			
Regu	ulation	40 CFR § 60.768 Recordkeeping Requirements	Response
	a record of the ro	e analysis for which corrective actions are required in §60.765(a)(3)(a) to teause analysis conducted, including a description of the recommend the date(s) the corrective action(s) were completed	
	for any root cause analysis for which corrective actions are required in §60.765(a)(3)(ii) or (a)(5)(ii), keep a record of the root cause analysis conducted, the corrective action analysis, the date for corrective action(s) already completed following the positive pressure reading or high temperature reading, and, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates		
	keep a record of corrective action reading, for actio commencement	e analysis for which corrective actions are required in §60.765(a)(3)(in the root cause analysis conducted, the corrective action analysis, the (s) already completed following the positive pressure reading or high n(s) not already completed, a schedule for implementation, including and completion dates, and a copy of any comments or final approval r schedule from the regulatory agency	e date for temperature proposed
If NO	, attach a detaile	d explanation.	
(f)		Have you converted design capacity from volume to mass or mass to volume to demonstrate that landfill design capacity is less than 2.5 million megagrams or 2.5 million cubic meters, as provided in the definition of "design capacity"?	☐ YES ☐ NO
If NO	, skip to (g) belov	V.	
(f)		Are you keeping readily accessible, on-site records of the following conversion-related data?	☐ YES ☐ NO
	the annual recalculation of site-specific density		
	the design capacity		
	the supporting documentation		
Note: Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.			
If NO, attach a detailed explanation.			
(g)		Are you demonstrating that site-specific surface methane emissions are below 500 parts per million by conducting surface emission monitoring under the Tier 4 procedures specified in §60.764(a)(6)?	☐ YES ☐ NO

Check the Most Appropriate Answer and Fill in the Blanks				
Regul	ation	40 CFR § 60.768 Recordkeeping Requirements	Response	
If NO,	skip to (h) below	<i>V</i> .		
(g)		Are you keeping (for at least 5 years) up-to-date, readily accessible records of all surface emissions monitoring and information related to monitoring instrument calibrations conducted according to sections 8 and 10 of Method 21 of appendix A of this part, including all of the following?	☐ YES ☐ NO	
c u t	calibration records that includes: date of calibration and initials of operator performing the calibration; calibration gas cylinder identification, certification date, and certified concentration; instrument scale(s) used; description of any corrective action taken if the meter readout could not be adjusted to correspond to the calibration gas value; and, if an owner or operator makes their own calibration gas, a description of the procedure used			
	digital photograp	hs of the instrument setup, including the wind barrier		
Note : The photographs must be time and date-stamped and taken at the first sampling location prior to sampling and at the last sampling location after sampling at the end of each sampling day, for the duration of the Tier 4 monitoring demonstration.				
		ch surface scan reading that is detailed to the nearest second, based begins and a log for the length of time each sample was taken using		
i	location of each surface scan reading, the owner or operator must determine the coordinates using an instrument with an accuracy of at least 4 meters, coordinates must be in decimal degrees with at least five decimal places.			
r	monitored metha	ne concentration (parts per million) of each reading		
	packground meth	nane concentration (parts per million) after each instrument calibration	n test	
	adjusted methan	e concentration using most recent calibration (parts per million)		
	•	n at each surface penetration, the unique identification location label graph (d) of this section	matching the label	
☐ r	ecords of the op	erating hours of the gas collection system for each destruction device		

Check the Most Appropriate Answer and Fill in the Blanks			
Regulation	40 CFR § 60.768 Recordkeeping Requirements	Response	
If NO, attach a detaile	ed explanation.		
(h)	Are you keep for at least 5 years up-to-date, readily accessible records of all collection and control system monitoring data for parameters measured in §60.766(a)(1), (2), and (3)?	☐ YES ☐ NO	
If NO, attach a detaile	ed explanation.		
	equired to be maintained by this subpart that are submitted electronicated in electronic format.	ally via the EPA's	
Note: For each owner or operator reporting leachate or other liquids addition under §60.767(k), keep records of any engineering calculations or company records used to estimate the quantities of leachate or liquids added, the surface areas for which the leachate or liquids were applied, and the estimates of annual waste acceptance or total waste in place in the areas where leachate or liquids were applied.			
Regulation	40 CFR § 60.769 Specifications for Active Collection Systems	Response	
(a)	Is this landfill required to comply with § 60.762(b)(2)(i)?	☐ YES ☐ NO	
If YES, continue.			
If NO, skip the remain	nder of this checklist.		
Note: Compliance with equal to 34 megagran	th \S 60.762(b)(2)(i) is required if the calculated NMOC emission rate in the per year.	s greater than or	
(a)	Have procedures and alternative mean of control (AMOC) for the GCCS been approved by the agency as provided in § 60.767(c)(2) and (3)?	☐ YES ☐ NO	
If YES, attach a detailed explanation of these alternative procedures and proof of agency AMOC approval.			
If NO, continue.			
(a)	Will you site active collection wells, horizontal collectors, surface collectors, or other extraction devices at a sufficient density throughout all gas producing areas?	☐ YES ☐ NO	
If NO, attach a detailed explanation.			
(a)(1)	Are the collection devices within the interior and along the perimeter areas certified by a professional engineer to achieve comprehensive control of surface gas emissions?	☐ YES ☐ NO	
and flow characteristi accessibility, compati corrosion resistance,	ssues shall be addressed in the design: depths of refuse, refuse gas cs, cover properties, gas system expandability, leachate and condens bility with filling operations, integration with closure end use, air intrus fill settlement, resistance to the refuse decomposition heat, and ability or sections for repair or troubleshooting without shutting down entires	sate management, ion control, y to isolate	

Check the Most Appropriate Answer and Fill in the Blanks			
Regulation	40 CFR § 60.769 Specifications for Active Collection Systems	Response	
If NO, attach a detaile	d explanation.		
(a)(2)	Does the density of gas collection devices determined by the design in paragraph (a)(1) of this section address landfill gas migration issues and augmentation of the collection system through the use of active or passive systems at the landfill perimeter or exterior?	☐ YES ☐ NO	
If NO, attach a detailed explanation.			
(a)(3)	Will the placement of gas collection devices determined by the design in paragraph (a)(1) of this section control all gas producing areas, except as provided by paragraphs (a)(3)(i) and (a)(3)(ii) of this section?	☐ YES ☐ NO	
If NO, attach a detailed explanation.			
(a)(3)(i)	Will this landfill have any segregated area(s) of asbestos or nondegradable material?	☐ YES ☐ NO	
(a)(3)(i)	Will such area(s) be excluded from collection and documented as being excluded as provided under § 60.768(d)?	☐ YES ☐ NO	

Check the Most Appropriate Answer and Fill in the Blanks			
Regulation	40 CFR § 60.769 Specifications for Active Collection Systems	Response	
Note: The documentation shall provide the nature, date of deposition, location and amount of asbestos or nondegradable material deposited in the area and shall be provided to the Agency upon request.			
(a)(3)(ii)	Can this site demonstrate that all excluded, nonproductive areas of the landfill contribute less than 1 percent of the total amount of NMOC emissions from the landfill?	☐ YES ☐ NO	
If YES, nonproductive area of the landfill may be excluded from control. The amount, location, and age of the material shall be documented and provided to the Agency upon request. A separate NMOC emissions estimate shall be made for each section proposed for exclusion, and the sum of all such sections shall be compared to the NMOC emissions estimate for the entire landfill. Emissions from each section shall be computed using the following equation:			
$Q_i = 2 \text{ k L}_o \text{ M}_i \text{ (e}^{-\text{kt i}} \text{) (C}_{\text{NMOC}} \text{) } (3.6 \times 10^{-9})$ where, $Q_i = \text{NMOC}$ emission rate from the i th section, Mg per year k = methane generation rate constant, year ⁻¹ $L_o = \text{methane generation potential}$, cubic meters per Mg solid waste $M_i = \text{mass of the degradable solid waste in the i}^{th} \text{ section, Mg}$ $t_i = \text{age of the solid waste in the i}^{th} \text{ section, years}$ $C_{\text{NMOC}} = \text{concentration of nonmethane organic compounds, parts per million by volume}$ $3.6 \times 10^{-9} = \text{conversion factor}$ If NO, this equation cannot be used, skip to (b) below.			
Note: If the owner/operator is proposing to exclude, or cease gas collection and control from, nonproductive physically separated (e.g., separately lined) closed areas that already have gas collection systems, NMOC emissions from each physically separated closed area must be computed using either Equation 3 in §60.764(b) or Equation 7 in paragraph (a)(3)(ii)(A) of this section.			
Note: The mass of nondegradable solid waste contained within the given section may be subtracted from the total mass of the section when estimating emissions provided the nature, location, age, and amount of the nondegradable material is documented as provided in paragraph (a)(3)(i) of this section.			
(a)(3)(iii)	Were the values for k and C_{NMOC} used in (a)(3)(ii) above determined by field testing?	☐ YES ☐ NO	
Note: The values for k and C_{NMOC} determined in field testing must be used if field testing has been performed in determining the NMOC emission rate or the radii of influence (this distance from the well center to a point in the landfill where the pressure gradient applied by the blower or compressor approaches zero).			
If NO, skip the next two questions.			
(a)(3)(iii) year-1	What is the value of k as determined by field testing?	year ¹	
(a)(3)(iii)	What is the value of C _{NMOC} as determined by field testing?	ppmv	
(a)(3)(iii)	Were default values for k, L_o , and C_{NMOC} provided in § 60.764(a)(1) or the alternative values from § 60.764(a)(5) used in (a)(3)(ii) above?	☐ YES ☐ NO	

Check the Most Appropriate Answer and Fill in the Blanks			
Regulation	40 CFR § 60.769 Specifications for Active Collection Systems	Response	
(b)	Is the collection and control system required to comply with § 60.762(b)(2)(ii)(A)?	☐ YES ☐ NO	
If YES, complete section	ons (b) and (c) below.		
If NO, attach an explai	nation.		
Note: Compliance with equal to 34 megagram	h § 60.762(b)(2)(i) is required if the calculated NMOC emission rate is no per year.	s greater than or	
(b)(1)	Will the landfill gas extraction components be constructed of polyvinyl chloride (PVC), high density polyethylene (HDPE) pipe, fiberglass, stainless steel, or other nonporous corrosion resistant material of suitable dimensions?	☐ YES ☐ NO	
	ed suitably sized, extraction components must be able to: convey prop llation, static, and settlement forces; and withstand planned overburg		
If NO, attach a detailed	d explanation.		
(b)(1)	Will the collection system extend as necessary to comply with emission and migration standards?	☐ YES ☐ NO	
If NO, attach a detailed explanation.			
(b)(1)	Will collection devices such as wells and horizontal collectors be perforated to allow gas entry without head loss sufficient to impair performance across the intended extent of control?	☐ YES ☐ NO	
If NO, attach a detailed explanation.			
(b)(1)	Will perforations be situated with regard to the need to prevent excessive air infiltration?	☐ YES ☐ NO	
If NO, attach a detailed explanation.			
(b)(2)	Will vertical wells be placed so as not to endanger underlying liners and to address the occurrence of water within the landfill?	☐ YES ☐ NO	
If NO, attach a detailed explanation.			
(b)(2)	Will holes and trenches constructed for piped wells and horizontal collectors be of sufficient cross-section so as to allow for their proper construction and completion including, for example, centering of pipes and placement of gravel backfill?	☐ YES ☐ NO	

Check the Most Appropriate Answer and Fill in the Blanks			
Regulation	40 CFR § 60.769 Specifications for Active Collection Systems	Response	
If NO, attach a detailed explanation.			
(b)(2)	Will collection devices be designed so as not to allow indirect short circuiting of air into the cover or refuse into the collection system or gas into the air?	YES NO	
If NO, attach a detailed	d explanation.		
(b)(2)	Will any gravel used around pipe perforations be of a dimension so as not to penetrate or block perforations?	☐ YES ☐ NO	
If NO, attach a detailed	d explanation.		
(b)(3)	Will collection devices be connected to the collection header pipes below or above the landfill surface?	☐ YES ☐ NO	
☐ above			
☐ below			
☐ both			
If NO, attach a detailed	d explanation.		
(b)(3)	Will the connector assembly include a positive closing throttle valve, any necessary seals and couplings, access couplings and at least one sampling port?	☐ YES ☐ NO	
If NO, attach a detailed	d explanation.		
(b)(3)	Will the collection devices be constructed of PVC, HDPE, fiberglass, stainless steel, or other nonporous material of suitable thickness?	YES NO	
If NO, attach a detailed	d explanation.		
(c)	Will the landfill gas be conveyed through collection header pipe(s) to a control system which complies with § 60.762(b)(2)(iii)?	☐ YES ☐ NO	
Note: If the site has approval for an alternate means of control under the provisions of § 60.767(c)(3) if so, attach proof of approval.			
If NO, attach a detailed explanation.			
(c)(1)	Is this an existing collection system?	☐ YES ☐ NO	
If YES, continue.			
If NO, skip to (c)(2).			
(c)(1)	Is flow data available?	☐ YES ☐ NO	

Check the Most Appropriate Answer and Fill in the Blanks			
Regulation	40 CFR § 60.769 Specifications for Active Collection Systems	Response	
If YES, use the flow data to project the maximum flow rate.			
If NO, the maximum flow rate shall be calculated per § 60.765(a)(1).			
(c)(2)	Will the maximum flow rate be calculated in accordance with § 60.765(a)(1)?	☐ YES ☐ NO	
If NO, attach a detailed explanation.			
(c)	Will the gas mover equipment be sized to handle the maximum gas generation flow rate expected over the intended use period?	☐ YES ☐ NO	
If NO, attach a detailed explanation.			
Note: The maximum gas generation flow rate must be calculated as specified in § 60.765(a)(1).			