State of Utah

SPENCER J. COX
Governor

DEIDRE HENDERSON
Lieutenant Governor

Department of
Environmental Quality

Kimberly D. Shelley
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

10129

Title V Operating Permit

PERMIT NUMBER: 1100033004 - **DRAFT**
DATE OF PERMIT: TBD
Date of Last Revision: TBD

This Operating Permit is issued to, and applies to the following:

Name of Permittee:

Wasatch Integrated Waste Mgt District
1997 East 3500 North
Layton, UT 84040

Permitted Location:

Davis Landfill
1997 East 3500 North
Layton, UT 84040

UTM coordinates: 421500 m Easting, 4550700 m Northing
SIC code: 4953 (Refuse Systems)

By:

_____
Bryce C. Bird, Director

Prepared By:

Scott Hanks
shanks@utah.gov
385-306-6504

ENFORCEABLE DATES AND TIMELINES

The following dates or timeframes are referenced in Section I: General Provisions of this permit.

Annual Certification Due:	February 1, and on that date of every calendar year that this permit is in force.
Renewal application due:	TBD
Permit expiration date:	TBD
Definition of "prompt":	written notification within 7 days.

ABSTRACT

Wasatch Integrated Waste Management District (WIWMD) operates a municipal waste landfill located in Davis County, Utah. Wasatch Integrated Waste Management District Davis Landfill is a source originally required to submit a Title V application due to being a major source for NO_x, CO and HAPs. The source is now an area source that is required to submit a Title V application according to 40 CFR 60 Subpart XXX.

WIWMD is subject to:

40 CFR 60 Subpart A - General Provisions

40 CFR 60 Subpart XXX - Standards of Performance for Municipal Solid Waste Landfills That Commenced Construction, Reconstruction, or Modification After July 17, 2014. WIWMD is a Title V source as required by 40 CFR Part 60 Subpart XXX.

40 CFR 60 Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

40 CFR 63 Subpart A - General Provisions

40 CFR 63 Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

OPERATING PERMIT HISTORY

Permit/Activity	Date Issued	Recorded Changes
Title V renewal application (Project #OPP0101290015)	TBD	- Renewal of Title V Permit. - Update state and federal rule conditions.
Title V administrative amendment - enhanced AO (Project #OPP0101290014)	11/30/2022	- Changes to incorporate DAQE-AN101290026-22, dated August 12, 2022. · Addition of new landfill gas generator engine. · Addition of emergency generator engine requirements. · Clarify fugitive dust requirements. - DAQE-AN101290026-22 supersedes DAQE-AN101290024-19 that permitted the addition of an Enclosed Back-up Flare. - Update Emission Unit list in II.A. - Update Federal and State Rules.
Title V renewal application (Project #OPP0101290011)	7/9/2019	-Permit renewal. -Removed municipal solid waste combustor and associated equipment.
Title V administrative amendment by DAQ (Project #OPP0101290010)	11/25/2014	Additions: Revise Approval Order citations per issuance of DAQE-AN101290021-14 -Remove the following non-road engines: Product Screen (110 Hp), Trommel Screen (80 Hp), Tub Grinder (650 Hp), Trailer Mounted Vacuum Excavator (80 Hp), two (2) Compressors (30 Hp each), Pressure Washer (24 Hp). -Remove three passive landfill gas vents. -Remove liquid propane-fired comfort heaters rated at less than 5 MMBtu/hr. -Update sulfur fuel requirements per new AO. -Update generator hours of usage per new AO. -Correct 40 CFR Part 63, Subpart ZZZZ requirements.
Title V renewal application (Project #OPP0101290008)	10/29/2013	Additions: Revise Approval Order citations per issuance of DAQE-AN101290020-12 -Identify non-road engines.

		-Remove VOC-solvent degreaser. -Add opacity limits for carbon and lime silo vents. -Add 40 CFR Part 63, Subpart ZZZZ conditions for RICE engines. -Add fugitive dust requirements R307-309-5. -Remove fugitive dust requirements R307-205.
Title V administrative amendment - enhanced AO (Project #OPP0101290006)	01/23/2008	Additions: To add: -One Diesel-fired product screen rated at 110 Hp. - One Diesel-fired trailer mounted vacuum excavator rated at 80 HP -One Diesel-fired compressor rated at 30 HP. -One natural gas fired backup generator rated at 195 HP. -One Gasoline powered pressure washer rated at 24 HP with a diesel fired burner -revised hours of operation for various existing engines on-site. -Clarification that the Municipal Waste Combustors can burn #1 Fuel Oil. To remove: -One 5 Hp and one 15 Hp engine. -Updated fugitive dust requirements. -Revised Fuel-sulfur requirements. Deletions: To delete: - 5 and 15 Hp engines.
Title V administrative amendment by source (Project #OPP0101290004)	10/03/2005	Changes: to add 2,628 hp diesel emergency generator.
Title V administrative amendment by source (Project #OPP0101290003)	10/24/2003	Changes: to increase the hours of operation for one 80 hp diesel generator located at the landfill.
Title V administrative amendment by source (Project #OPP0101290002)	06/23/2003	Changes: Remove 300 hp engine from landfill and add 80 and 650 hp engines
Title V initial application (Project #OPP0101290001)	10/29/2002	

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Issued under authority of Utah Code Ann. Section 19-2-104 and 19-2-109.1, and in accordance with Utah Administrative Code R307-415 Operating Permit Requirements.

All definitions, terms and abbreviations used in this permit conform to those used in Utah Administrative Code R307-101 and R307-415 (Rules), and 40 Code of Federal Regulations (CFR), except as otherwise defined in this permit. Unless noted otherwise, references cited in the permit conditions refer to the Rules.

Where a permit condition in Section I, General Provisions, partially recites or summarizes an applicable rule, the full text of the applicable portion of the rule shall govern interpretations of the requirements of the rule. In the case of a conflict between the Rules and the permit terms and conditions of Section II, Special Provisions, the permit terms and conditions of Section II shall govern except as noted in Provision I.M, Permit Shield.

SECTION I: GENERAL PROVISIONS

I.A **Federal Enforcement.**

All terms and conditions in this permit, including those provisions designed to limit the potential to emit, are enforceable by the EPA and citizens under the Clean Air Act of 1990 (CAA) except those terms and conditions that are specifically designated as "State Requirements". (R307-415-6b)

I.B **Permitted Activity(ies).**

Except as provided in R307-415-7b(1), the permittee may not operate except in compliance with this permit. (See also Provision I.E, Application Shield)

I.C **Duty to Comply.**

I.C.1 The permittee must comply with all conditions of the operating permit. Any permit noncompliance constitutes a violation of the Air Conservation Act and is grounds for any of the following: enforcement action; permit termination; revocation and reissuance; modification; or denial of a permit renewal application. (R307-415-6a(6)(a))

I.C.2 It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (R307-415-6a(6)(b))

I.C.3 The permittee shall furnish to the Director, within a reasonable time, any information that the Director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director copies of records required to be kept by this permit or, for information claimed to be confidential, the permittee may furnish such records directly to the EPA along with a claim of confidentiality. (R307-415-6a(6)(e))

I.C.4 This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance shall not stay any permit condition, except as provided under R307-415-7f(1) for minor permit modifications. (R307-415-6a(6)(c))

I.D **Permit Expiration and Renewal.**

I.D.1 This permit is issued for a fixed term of five years and expires on the date shown under "Enforceable Dates and Timelines" at the front of this permit. (R307-415-6a(2))

I.D.2 Application for renewal of this permit is due on or before the date shown under "Enforceable Dates and Timelines" at the front of this permit. An application may be submitted early for any reason. (R307-415-5a(1)(c))

I.D.3 An application for renewal submitted after the due date listed in I.D.2 above shall be accepted for processing, but shall not be considered a timely application and shall not relieve the permittee of any enforcement actions resulting from submitting a late application. (R307-415-5a(5))

I.D.4 Permit expiration terminates the permittee's right to operate unless a timely and complete renewal application is submitted consistent with R307-415-7b (see also Provision I.E, Application Shield) and R307-415-5a(1)(c) (see also Provision I.D.2). (R307-415-7c(2))

I.E **Application Shield.**

If the permittee submits a timely and complete application for renewal, the permittee's failure to have an operating permit will not be a violation of R307-415, until the Director takes final action on the permit renewal application. In such case, the terms and conditions of this permit shall remain in force until permit renewal or denial. This protection shall cease to apply if, subsequent to the completeness determination required pursuant to R307-415-7a(3), and as required by R307-415-5a(2), the applicant fails to submit by the deadline specified in writing by the Director any additional information identified as being needed to process the application. (R307-415-7b(2))

I.F **Severability.**

In the event of a challenge to any portion of this permit, or if any portion of this permit is held invalid, the remaining permit conditions remain valid and in force. (R307-415-6a(5))

I.G **Permit Fee.**

I.G.1 The permittee shall pay an annual emission fee to the Director consistent with R307-415-9. (R307-415-6a(7))

I.G.2 The emission fee shall be due on October 1 of each calendar year or 45 days after the source receives notice of the amount of the fee, whichever is later. (R307-415-9(4)(a))

I.H **No Property Rights.**

This permit does not convey any property rights of any sort, or any exclusive privilege. (R307-415-6a(6)(d))

I.I **Revision Exception.**

No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (R307-415-6a(8))

I.J **Inspection and Entry.**

I.J.1 Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director or an authorized representative to perform any of the following:

I.J.1.a Enter upon the permittee's premises where the source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit. (R307-415-6c(2)(a))

I.J.1.b Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit. (R307-415-6c(2)(b))

I.J.1.c Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practice, or operation regulated or required under this permit. (R307-415-6c(2)(c))

I.J.1.d Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with this permit or applicable requirements. (R307-415-6c(2)(d))

I.J.2 Any claims of confidentiality made on the information obtained during an inspection shall be made pursuant to Utah Code Ann. Section 19-1-306. (R307-415-6c(2)(e))

I.K **Certification.**

Any application form, report, or compliance certification submitted pursuant to this permit shall contain certification as to its truth, accuracy, and completeness, by a responsible official as defined in R307-415-3. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (R307-415-5d)

I.L **Compliance Certification.**

I.L.1 Permittee shall submit to the Director an annual compliance certification, certifying compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. This certification shall be submitted no later than the date shown under "Enforceable Dates and Timelines" at the front of this permit, and that date each year following until this permit expires. The certification shall include all the following (permittee may cross-reference this permit or previous reports): (R307-415-6c(5))

I.L.1.a The identification of each term or condition of this permit that is the basis of the certification;

I.L.1.b The identification of the methods or other means used by the permittee for determining the compliance status with each term and condition during the certification period. Such methods and other means shall include, at a minimum, the monitoring and related recordkeeping and reporting requirements in this permit. If necessary, the permittee also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Act, which prohibits knowingly making a false certification or omitting material information;

I.L.1.c The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was

continuous or intermittent. The certification shall be based on the method or means designated in Provision I.L.1.b. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 occurred; and

I.L.1.d Such other facts as the Director may require to determine the compliance status.

I.L.2 The permittee shall also submit all compliance certifications to the EPA, Region VIII, at the following address or to such other address as may be required by the Director: (R307-415-6c(5)(d))

Environmental Protection Agency, Region VIII
Office of Enforcement, Compliance and Environmental Justice
(mail code 8ENF)
1595 Wynkoop Street
Denver, CO 80202-1129

I.M **Permit Shield.**

I.M.1 Compliance with the provisions of this permit shall be deemed compliance with any applicable requirements as of the date of this permit, provided that:

I.M.1.a Such applicable requirements are included and are specifically identified in this permit, or (R307-415-6f(1)(a))

I.M.1.b Those requirements not applicable to the source are specifically identified and listed in this permit. (R307-415-6f(1)(b))

I.M.2 Nothing in this permit shall alter or affect any of the following:

I.M.2.a The emergency provisions of Utah Code Ann. Section 19-1-202 and Section 19-2-112, and the provisions of the CAA Section 303. (R307-415-6f(3)(a))

I.M.2.b The liability of the owner or operator of the source for any violation of applicable requirements under Utah Code Ann. Section 19-2-107(2)(a)(xiii) and Section 19-2-110 prior to or at the time of issuance of this permit. (R307-415-6f(3)(b)

I.M.2.c The applicable requirements of the Acid Rain Program, consistent with the CAA Section 408(a). (R307-415-6f(3)(c))

I.M.2.d The ability of the Director to obtain information from the source under Utah Code Ann. Section 19-2-120, and the ability of the EPA to obtain information from the source under the CAA Section 114. (R307-415-6f(3)(d))

I.N **Reserved.**

I.O **Operational Flexibility.**

Operational flexibility is governed by R307-415-7d(1).

I.P **Off-permit Changes.**

Off-permit changes are governed by R307-415-7d(2).

I.Q **Administrative Permit Amendments.**

Administrative permit amendments are governed by R307-415-7e.

I.R **Permit Modifications.**

Permit modifications are governed by R307-415-7f.

I.S **Records and Reporting.**

I.S.1 Records.

I.S.1.a The records of all required monitoring data and support information shall be retained by the permittee for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original strip-charts or appropriate recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. (R307-415-6a(3)(b)(ii))

I.S.1.b For all monitoring requirements described in Section II, Special Provisions, the source shall record the following information, where applicable: (R307-415-6a(3)(b)(i))

I.S.1.b.1 The date, place as defined in this permit, and time of sampling or measurement.

I.S.1.b.2 The date analyses were performed.

I.S.1.b.3 The company or entity that performed the analyses.

I.S.1.b.4 The analytical techniques or methods used.

I.S.1.b.5 The results of such analyses.

I.S.1.b.6 The operating conditions as existing at the time of sampling or measurement.

I.S.1.c Additional record keeping requirements, if any, are described in Section II, Special Provisions.

I.S.2 Reports.

I.S.2.a Monitoring reports shall be submitted to the Director every six months, or more frequently if specified in Section II. All instances of deviation from permit requirements shall be clearly identified in the reports. (R307-415-6a(3)(c)(i))

I.S.2.b All reports submitted pursuant to Provision I.S.2.a shall be certified by a responsible official in accordance with Provision I.K of this permit. (R307-415-6a(3)(c)(i)

I.S.2.c The Director shall be notified promptly of any deviations from permit requirements including those attributable to upset conditions as defined in this permit, the

probable cause of such deviations, and any corrective actions or preventative measures taken. Prompt, as used in this condition, shall be defined as written notification within the number of days shown under "Enforceable Dates and Timelines" at the front of this permit. Deviations from permit requirements due to breakdowns shall be reported in accordance with the provisions of R307-107. (R307-415-6a(3)(c)(ii))

I.S.3 Notification Addresses.

I.S.3.a All reports, notifications, or other submissions required by this permit to be submitted to the Director are to be sent to the following address or to such other address as may be required by the Director:

Utah Division of Air Quality
P.O. Box 144820
Salt Lake City, UT 84114-4820
Phone: 801-536-4000

I.S.3.b All reports, notifications or other submissions required by this permit to be submitted to the EPA should be sent to one of the following addresses or to such other address as may be required by the Director:

For annual compliance certifications:

Environmental Protection Agency, Region VIII
Office of Enforcement, Compliance and Environmental Justice
(mail code 8ENF)
1595 Wynkoop Street
Denver, CO 80202-1129

For reports, notifications, or other correspondence related to permit modifications, applications, etc.:

Environmental Protection Agency, Region VIII
Air Permitting and Monitoring Branch (mail code 8ARD-PM)
1595 Wynkoop Street
Denver, CO 80202-1129
Phone: 303-312-7015

I.T **Reopening for Cause.**

I.T.1 A permit shall be reopened and revised under any of the following circumstances:

I.T.1.a New applicable requirements become applicable to the permittee and there is a remaining permit term of three or more years. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the terms and conditions of this permit have been extended pursuant to R307-415-7c(3), application shield. (R307-415-7g(1)(a))

I.T.1.b The Director or EPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit. (R307-415-7g(1)(c))

I.T.1.c EPA or the Director determines that this permit must be revised or revoked to assure compliance with applicable requirements. (R307-415-7g(1)(d))

I.T.1.d Additional applicable requirements are to become effective before the renewal date of this permit and are in conflict with existing permit conditions. (R307-415-7g(1)(e))

I.T.2 Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the Acid Rain Program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into this permit. (R307-415-7g(1)(b))

I.T.3 Proceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. (R307-415-7g(2))

I.U **Inventory Requirements.**

An emission inventory shall be submitted in accordance with the procedures of R307-150, Emission Inventories. (R307-150)

I.V **Title IV and Other, More Stringent Requirements.**

Where an applicable requirement is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, Acid Deposition Control, both provisions shall be incorporated into this permit. (R307-415-6a(1)(b))

SECTION II: SPECIAL PROVISIONS

II.A **Emission Unit(s) Permitted to Discharge Air Contaminants.**
(R307-415-4(3)(a) and R307-415-4(4))

II.A.1 **Permitted Source**
Source-wide conditions

II.A.2 **Landfill (designated as LNF-0)**
Unit Description: The landfill is used for disposal of municipal solid waste, construction waste, and demolition waste.

II.A.3 **Landfill Cell 1 (designated as LNF-1)**
Unit Description: One of two cells located at the landfill. This unlined cell began accepting waste in the 1950s and closed in 2000.

II.A.4 **Landfill Cell 2 (designated as LNF-2)**
Unit Description: One of two cells located at the landfill. This lined cell began accepting waste in August of 1998.

II.A.5 **Landfill Gas-Collection and Control System**
Unit Description: Landfill gas-collection system for cells 1 and 2 rated at 1200 scfm. The collection system is controlled by a fully enclosed flare rated at 36.2 MMBtu/hr.

II.A.6 **Landfill Gas (LFG) Generator Engine**
LFG Generator Engine. Fuel: Landfill Gas. Rating: 2,233 HP.

II.A.7 **Enclosed Primary Flare**
A fully enclosed flare rated at 36.2 MMBTU/hr. This is part of the landfill gas collection and control system.

II.A.8 **Enclosed Back-up Flare**
Enclosed backup flare. Rating: 36.2 MMBTU/hr. Manufactured Date: 2019. Provides additional system reliability and safety to the LFG collection system and landfill operations.

II.A.9 **Enclosed Flares**
Includes Enclosed Primary Flare in II.A.7, and Enclosed Back-up Flare in II.A.8.

II.A.10 **Emergency NG Fired Backup Generator**
Unit Description: One natural gas-fired Kohler backup generator rated at 195 Hp (installed May 2006).

II.B **Requirements and Limitations**

The following emission limitations, standards, and operational limitations apply to the permitted facility as indicated:

II.B.1 **Conditions on permitted source (Source-wide).**

II.B.1.a **Condition:**

(1) Opacity caused by fugitive dust shall not exceed 10% at the property boundary, and 20% on site. [Origin: R307-309-5(1)]. [R307-309]

(2) The permittee shall submit a fugitive dust control plan to the Director in accordance with R307-309-6. [Origin: R307-309-5(2)]. [R307-309]

(3) The permittee shall comply with the most current fugitive dust control plan (FDCP) acceptable to the Director for control of all dust sources associated with the landfill operations. [Origin: DAQE-AN101290026-22]. [R307-309]

(4) Opacity requirements shall not apply when the wind speed exceeds 25 miles per hour if the permittee has implemented, and continues to implement, the accepted fugitive dust control plan and administers one or more of the following contingency measures:

(a) Pre-event watering;

(b) Hourly watering;

(c) Additional chemical stabilization;

(d) Cease or reduce fugitive dust producing operations to the extent practicable.

[Origin: R307-309]. [R307-309-5]

II.B.1.a.1 **Monitoring:**

(1) For paragraph (1) of the above Condition: In lieu of monitoring via visible emissions observations, adherence to the most recently approved fugitive dust control plan shall be monitored to demonstrate that appropriate measures are being implemented to control fugitive dust.

(2) Recordkeeping shall serve as monitoring for paragraph (2) of the above Condition.

(3) Recordkeeping shall serve as monitoring for paragraph (3) of the above Condition.

(4) For paragraph (4) of the above Condition: wind speed shall be measured by an anemometer to identify periods when velocity exceeds 25 mph. [R307-309-5(4)].

II.B.1.a.2 **Recordkeeping:**

(1) Actions taken to control fugitive dust shall be described and maintained in a log including:

(a) Date and names of those supervising the control; and

(b) The name of the person making the log entry.

(2) A copy of the FDCP shall be maintained on-site.

(3) Records of measures taken to control fugitive dust shall be maintained to demonstrate adherence to the most recently approved fugitive dust control plan. Records shall be maintained in accordance with the plan.

(4) If wind speeds are measured to establish an exception from the visible emissions limits, records of the administered contingency measures and the wind speed measurements shall be maintained.

(5) Records shall be maintained as described in Provision I.S.1 of this permit.

II.B.1.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.1.b **Condition:**

(1) If the permittee is responsible for construction or maintenance of any existing road or has right-of-way easement or possesses the right to use the same whose activities result in fugitive dust from the road, the permittee shall minimize fugitive dust to the maximum extent possible. If materials are deposited that may create fugitive dust on a public or private paved road, the permittee shall clean the road promptly.

(2) Unpaved Roads. If the permittee is responsible for construction or maintenance of any new or existing unpaved road, the permittee shall prevent, to the maximum extent possible, the deposit of material from the unpaved road onto any intersecting paved road during construction or maintenance. If materials are deposited that may create fugitive dust on a public or private paved road, the permittee shall clean the road promptly.

[Origin: R307-309]. [R307-309-9]

II.B.1.b.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.1.b.2 **Recordkeeping:**

Records that demonstrate compliance with this condition and records required by the most recently approved fugitive dust control plan shall be maintained in accordance with the plan and section I.S.1 of this permit.

II.B.1.b.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.1.c **Condition:**

Visible emissions from point sources shall not exceed 20% opacity unless otherwise specified in this permit. [Origin: DAQE-AN101290026-22]. [R307- 401-8]

II.B.1.c.1 **Monitoring:**

If an affected emission unit is operated during a calendar quarter, an opacity observation of the emission unit shall be performed in the quarter that the emission unit was operated. The opacity observation can be conducted at any time during the quarter. The opacity observation shall be conducted by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9, while the emission unit is operating. If visible emissions other than condensed water

vapor are observed from the emission unit, an opacity determination of that emission unit shall be performed by a certified observer within 24 hours of the initial visual emission observation. The opacity determination shall be performed in accordance with 40 CFR 60, Appendix A, Method 9.

II.B.1.c.2 **Recordkeeping:**

The permittee shall keep a log which includes the location and description of the emission unit. For each quarter, the log shall include either the date of the opacity observation and if visual emission other than condensed water vapor were observed or a note that the emission unit was not operated. For each observed visual emission other than condensed water vapor the permittee shall record: date and time of visual emission observation, emission unit location and description, time and date of opacity determination, and percent opacity. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.1.c.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.2 **Conditions on Landfill.**

II.B.2.a **Condition:**

The permittee shall comply with all applicable requirements in 40 CFR 60, Subpart XXX -Standards of Performance for Municipal Solid Waste Landfills That Commenced Construction, Reconstruction, or Modification After July 17, 2014. The permittee shall comply with the applicable General Provisions in 40 CFR 60, Subpart A.

(a) The permittee shall calculate a nonmethane organic compounds (NMOC) emission rate for the landfill using the procedures specified in Monitoring below [Origin: 40 CFR 60.762(b)].

(1) If the calculated NMOC emission rate is less than 34 megagrams per year, the permittee shall:

(i) Submit an annual emission report to the Director, except as provided for in Reporting (a)(1)(ii). [Origin: 40 CFR 60.762(b)(1)(i)]; and

(ii) Recalculate the NMOC emission rate annually using the procedures specified in Monitoring (a) until such time as the calculated NMOC emission rate is equal to or greater than 34 megagrams per year, or the landfill is closed [Origin: 40 CFR 60.762(b)(1)(ii)].

(A) If the calculated NMOC emission rate, upon initial calculation or annual recalculation is equal to or greater than 34 megagrams per year, the permittee shall either: comply with paragraph (a)(2) below; calculate NMOC emissions using the next higher tier in Monitoring (b)-(d); or conduct a surface emission monitoring demonstration using the procedures specified in Monitoring (f). [Origin: 40 CFR 60.762(b)(1)(ii)(A)].

(B) If the landfill is permanently closed, a closure notification shall be submitted to the Director as provided for in Reporting (e) [Origin: 40 CFR 60.762(b)(1)(ii)(B)].

(2) If the calculated NMOC emission rate is equal to or greater than 34 megagrams per year using Tier 1, 2, or 3 procedures, the permittee shall either: submit an initial or revised collection and control system design plan prepared by a professional engineer to the Director as specified in Reporting (c) or (d); calculate NMOC emissions using the next higher tier in Monitoring; or

conduct a surface emission monitoring demonstration using the procedures specified in Monitoring (f). Collection and control systems shall meet the requirements of 40 CFR 60.762(b)(2)(ii) and (iii). [Origin: 40 CFR 60.762(b)(2)(i)]

(i) Collection and control system requirements:

(A) The permittee shall install and start up a collection and control system that captures the gas generated within the landfill as required by paragraphs 40 CFR 60.762(b)(2)(ii)(A)-(D) [Origin: 40 CFR 60.762(b)(2)(ii)]

(B) The permittee shall route all the collected gas to a control system that complies with the requirements in either paragraph 40 CFR 60.762(b)(2)(iii)(A), (B), or (C) [Origin: 40 CFR 60.762(b)(2)(iii)]

(C) All emissions from any atmospheric vent from the gas treatment system are subject to the requirements of paragraph 40 CFR 60.762(b)(2)(iii)(A), or (B). Atmospheric vents located on the condensate storage tank are not part of the treatment system and are exempt from the requirements of paragraph 40 CFR 60.762(b)(2)(iii)(A), or (B) [Origin: 40 CFR 60.762(b)(2)(iii)(D)].

(D) Collection and control devices shall be operated in accordance with 40 CFR 60.763, 40 CFR 60.765, and 40 CFR 60.766; or the provisions of 40 CFR 63.1958, 63.1960, and 63.1961. Once the permittee begins to comply with the provisions of 40 CFR 63.1958, 63.1960, and 63.1961, the permittee shall continue to operate the collection and control device according to those provisions and cannot return to the provisions of 40 CFR 60.763, 60.765, and 60.766. [Origin: 40 CFR 60.762(b)(2)(iv)]

(E) Collection and control systems may be capped, removed, or decommissioned if the criteria of 40 CFR 60.762(b)(2)(v)(A)-(C) are met. [Origin: 40 CFR 60.762(b)(2)(v)].

(b) When the MSW landfill is closed, the permittee is no longer subject to the requirement to maintain an operating permit under 40 CFR Part 70 for the landfill if the landfill is not otherwise subject to the requirements of 40 CFR Part 70 and if either of the following conditions are met [Origin: 40 CFR 60.762(d)]:

(1) The landfill was never subject to the requirement for a control system under paragraph (a)(2) above. [Origin: 40 CFR 60.762(d)(1)]; or

(2) The permittee meets the conditions for control system removal specified in 40 CFR 60.762(b)(2)(v) [Origin: 40 CFR 60.762(d)(2)].

[Origin: 40 CFR 60 Subpart XXX]. [40 CFR 60.762(b)(1)-(2), 40 CFR 60.762(d)(1)-(2), 40 CFR 60.763]

II.B.2.a.1 **Monitoring:**

(a) NMOC emission rate. The permittee shall calculate the NMOC emission rate using either the equation provided in paragraph (a)(1) or (a)(2) below. Both equations may be used if the actual year to year solid waste acceptance rate is known, as specified in paragraph (a)(1) 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)(2), for part of the life of the landfill. The values to be used in both equations are 0.02 per year for "k", 170 cubic meters per megagram for Lo, and 4,000 parts per million by volume as hexane for the CNMOC [40 CFR 60.764(a)(1)].

(1) The following equation shall be used if the actual year to year solid waste acceptance rate

is known.

M_{NMOC}= Sum (2 k L_o M_i(e^{-kti})(C_{NMOC})($3.6x10^{-9}$)) of i through n 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 ith section, years

C_{NMOC} = concentration of NMOC, parts per million by volume as hexane

$3.6x10^{-9}$ = conversion factor

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 Mi if documentation of the nature and amount of such wastes is maintained.

[40 CFR 60.764(a)(1)(i)(A)-(B)]

(2) The following equation shall be used if the actual year-to-year solid waste acceptance rate is unknown.

$M_{NMOC} = 2L_o R (e^{-kc}-e^{-kt}) C_{NMOC} (3.6 \times 10^{-9})$

Where:

M_{NMOC} = mass emission rate of NMOC, megagrams 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 landfill, years

C_{NMOC} = concentration of NMOC, parts per million by volume as hexane

c = time since closure, years; for active landfill c = O and e-kc = 1

3.6×10^{-9} = conversion factor.

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 of R, if documentation of the nature and amount of such wastes is maintained.

[40 CFR 60.764(a)(1)(ii)(A)-(B)]

(b) Tier 1. The permittee shall compare the calculated NMOC mass emission rate to the standard of 34 megagrams per year.
[40 CFR 60.764(a)(2)]

(1) If the NMOC emission rate calculated in paragraph (a), above, is less than 34 megagrams per year, then the permittee shall submit an NMOC emission rate report according to Reporting (a), and shall recalculate the NMOC mass emission rate annually as required by Condition (a)(1).

[40 CFR 60.764(a)(2)(i)]

(2) If the calculated NMOC emission rate is equal to or greater than 34 megagrams per year as calculated by paragraph (a) above, then the permittee shall either:

(i) Submit a gas collection and control system design plan within 1 year as specified in 40 CFR 60.767(c) and install and operate a gas collection and control system within 30 months according to 40 CFR 60.762(b)(2)(ii) and (iii);

(ii) Determine a site specific NMOC concentration and recalculate the NMOC emission rate using the Tier 2 procedures provided in paragraph (c) below; or

(iii) Determine a site-specific methane generation rate constant and recalculate the NMOC emission rate using the Tier 3 procedures provided in paragraph (d) below.

[40 CFR 60.764(a)(2)(ii)]

(c) Tier 2. The landfill permittee shall determine the site-specific NMOC concentration using the sampling procedures described in 40 CFR 60.764(a)(3). [40 CFR 60.764(a)(3)]

(1) Within 60 days after the date of completing each performance test (as defined in 40 CFR 60.8), the permittee shall submit the results according to Reporting (i)(1). [40 CFR 60.764(a)(3)(i)]

(2) The permittee shall recalculate the NMOC mass emission rate using the equation provided in paragraph (a)(1) or (a)(2) above and using the average site-specific NMOC concentration from the collected samples instead of the default value provided in paragraph (a) above. [40 CFR 60.764(a)(3)(ii)]

(3) If the resulting NMOC mass emission rate is less than 34 megagrams per year, then the permittee shall submit a periodic estimate of NMOC emissions in an NMOC emission rate report according to Reporting (a)(1), and shall recalculate the NMOC mass emission rate annually as required under Condition (a)(1)(ii). The site-specific NMOC concentration shall be retested every 5 years using the methods specified in this Monitoring section. [40 CFR 60.764(a)(3)(iii)]

(4) If the NMOC mass emission rate as calculated using the Tier 2 site-specific NMOC concentration is equal to or greater than 34 megagrams per year, the landfill permittee shall either:

(i) Submit a gas collection and control system design plan within 1 year as specified in 40 CFR 60.767(c) and install and operate a gas collection and control system within 30 months according to 40 CFR 60.762(b)(2)(ii) and (iii);

(ii) 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 (d) below; or

(iii) Conduct a surface emission monitoring demonstration using the Tier 4 procedures

specified in paragraph (f) below.

[40 CFR 60.764(a)(3)(iv)(A)-(C)].

(d) Tier 3. The site specific methane generation rate constant shall be determined using the procedures provided in 40 CFR 60 Appendix A Method 2E. The permittee shall estimate the NMOC mass emission rate using equations in paragraph (a) above and using a site specific methane generation rate constant k, and the site specific NMOC concentration as determined in paragraph (c) above instead of the default values provided in paragraph (a) above. The permittee shall compare the resulting NMOC mass emission rate to the standard of 34 megagrams per year. [40 CFR 60.764(a)(4)]

(1) If the NMOC mass emission rate as calculated using the Tier 2 site-specific NMOC concentration and Tier 3 site-specific methane generation rate is equal to or greater than 34 megagrams per year, the permittee shall either:

(i) Submit a gas collection and control system design plan within 1 year as specified in 40 CFR 60.767(c) and install and operate a gas collection and control system within 30 months according to 40 CFR 60.762(b)(2)(ii) and (iii); or

(ii) Conduct a surface emission monitoring demonstration using the Tier 4 procedures specified in paragraph (f) below. [40 CFR 60.764(a)(4)(i)(A)-(B)]

(2) If the NMOC mass emission rate is less than 34 megagrams per year, then the permittee shall recalculate the NMOC mass emission rate annually using the equation provided in paragraph (a)(1) or (a)(2) above 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 40 CFR 60.767(b)(1). 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. [40 CFR 60.754(a)(4)(ii)]

(e) Other methods. The permittee may use other methods to determine the NMOC concentration or a site-specific methane generation rate constant as an alternative to the methods required in paragraphs (c) and (d) above if the method has been approved by the EPA Administrator. [40 CFR 60.764(a)(5)].

(f) Tier 4. The landfill permittee shall demonstrate that surface methane emissions are below 500 parts per million. Surface emission monitoring shall be conducted on a quarterly basis using the following procedures. Tier 4 is allowed only if the landfill permittee can demonstrate that NMOC emissions are greater than or equal to 34 Mg/yr but less than 50 Mg/yr using Tier 1 or Tier 2. If both Tier 1 and Tier 2 indicate NMOC emissions are 50 Mg/yr or greater, then Tier 4 cannot be used. In addition, the landfill shall meet the criteria in paragraph (f)(viii) below. [40 CFR 60.764(a)(6)]

(i) The permittee shall measure surface concentrations of methane along the entire 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 specifications provided in 40 CFR 60.765(d). [40 CFR 60.764(a)(6)(i)]

(ii) The background concentration shall be determined by moving the probe inlet upwind and downwind at least 30 meters from the waste mass boundary of the landfill. [40 CFR 60.764(a)(6)(ii)]

(iii) Surface emission monitoring shall be performed in accordance with section 8.3.1 of Method 21 of appendix A of 40 CFR Part 60, except that the probe inlet shall be placed no more than 5 centimeters above the landfill surface; the constant measurement of distance above the surface should be based on a mechanical device such as with a wheel on a pole, except as described in paragraph (A) below. [40 CFR 60.764(a)(6)(iii)]

(A) The permittee shall use a wind barrier, similar to a funnel, when onsite average wind speed exceeds 4 miles per hour or 2 meters per second or gust exceeding 10 miles per hour. Average on-site wind speed shall also be determined in an open area at 5-minute intervals using an on-site anemometer with a continuous recorder and data logger for the entire duration of the monitoring event. The wind barrier shall surround the surface emissions monitor (SEM), and shall be placed on the ground, to ensure wind turbulence is blocked. SEM cannot be conducted if average wind speed exceeds 25 miles per hour. [40 CFR 60.764(a)(6)(iii)(A)]

(B) Landfill surface 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 shall also be monitored using a device meeting the specifications provided in 40 CFR 60.765(d). [40 CFR 60.764(a)(6)(iii)(B)]

(iv) Each permittee seeking to comply with the Tier 4 provisions in paragraph (f) of this Monitoring section shall maintain records of surface emission monitoring as provided in 40 CFR 60.768(g) and submit a Tier 4 surface emissions report as provided in Reporting (c)(4)(iii). [40 CFR 60.764(a)(6)(iv)].

(v) If there is any measured concentration of methane of 500 parts per million or greater from the surface of the landfill, the permittee shall submit a gas collection and control system design plan within 1 year of the first measured concentration of methane of 500 parts per million or greater from the surface of the landfill according to 40 CFR 60.767(c) and install and operate a gas collection and control system according to 40 CFR 60.762 (b)(2)(ii) and (iii) within 30 months of the most recent NMOC emission rate report in which the NMOC emission rate equals or exceeds 34 megagrams per year based on Tier 2. [40 CFR 60.764(a)(6)(v)]

(vi) If after four 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 from the surface of the landfill, the permittee shall continue quarterly surface emission monitoring using the methods specified in this Tier 4 section. [40 CFR 60.764(a)(6)(vi)]

(vii) If after four consecutive quarterly monitoring periods at a closed landfill there is no measured concentration of methane of 500 parts per million or greater from the surface of the landfill, the permittee shall conduct annual surface emission monitoring using the methods specified in this Tier 4 section. [40 CFR 60.764(a)(6)(vii)]

(viii) If a landfill has installed and operates a collection and control system that is not required by this subpart, then the collection and control system shall meet the following criteria:

(A) The gas collection and control system shall have operated for 6,570 out of 8,760 hours preceding the Tier 4 surface emissions monitoring demonstration. [40 CFR 60.764(a)(6)(viii)(A)]

(B) During the Tier 4 surface emissions monitoring demonstration, the gas collection and control system shall operate as it normally would to collect and control as much landfill gas as possible. [40 CFR 60.764(a)(6)(viii)(B)]

(g) NMOC emission rate for capping, removing, or decommissioning collection and control system. After the installation and startup of a collection and control system in compliance with this subpart, the permittee shall calculate the NMOC emission rate for purposes of determining when the system can be capped, removed or decommissioned as provided in 40 CFR 60.762(b)(2)(v), using Equation 3 below:

$M_{NMOC} = 1.89 \times 10^{-3} Q_{LFG} C_{NMOC}$ (Eq. 3)

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.

(1) The flow rate of landfill gas, QLFG, shall be determined by measuring the total landfill gas flow rate at the common header pipe that leads to the control system using a gas flow measuring device calibrated according to the provisions of section 10 of Method 2E of appendix A of 40 CFR Part 60.

(2) 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 25 or Method 25C. The sample location on the common header pipe shall be before any condensate removal or other gas refining units. The landfill permittee shall divide the NMOC concentration from Method 25 or Method 25C of appendix A of 40 CFR Part 60 by six to convert from CNMOC as carbon to CNMOC as hexane.

(3) The permittee may use another method to determine landfill gas flow rate and NMOC concentration if the method has been approved by the Director.

(i) Within 60 days after the date of completing each performance test (as defined in 40 CFR 60.8), the permittee shall submit the results of the performance test, including any associated fuel analyses, according to 40 CFR 60.767(i)(1).

(ii) [*Reserved*]

[40 CFR 60.764(b)(1)-(3)].

(h) [*Reserved*]

(i) Collection systems: For the performance test required in 40 CFR 60.762(b)(2)(iii)(B), Method 25 or 25C (Method 25C may be used at the inlet only) of appendix A of 40 CFR Part 60 shall be used to determine compliance with the 98 weight-percent efficiency or the 20 parts per million by volume outlet concentration level, unless another method to demonstrate compliance has been approved by the Director as provided by 40 CFR 60.767(c)(2). Method 3, 3A, or 3C shall be used to determine oxygen for correcting the NMOC concentration as hexane to 3 percent. 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. Method 18 may be used in conjunction with Method 25A on a limited basis (compound specific, e.g., methane) or Method 3C may be used to determine methane. The methane as carbon should be subtracted from the Method 25A total hydrocarbon value as carbon to give NMOC concentration as carbon. The landowner or operator shall divide the NMOC concentration as carbon by 6 to convert from the C_{NMOC} as carbon to

C_{NMOC} as hexane. Equation 4 below shall be used to calculate efficiency:

Control Efficiency = $(NMOC_{in} - NMOC_{out})/(NMOC_{in})$ (Eq. 4)

Where:

$NMOC_{in}$ = Mass of NMOC entering control device.

$NMOC_{out}$ = Mass of NMOC exiting control device.

[40 CFR 60.764(d)]

(j) Control systems: For the performance test required in 40 CFR 60.762(b)(2)(iii)(A), the net heating value of the combusted landfill gas as determined in 40 CFR 60.18(f)(3) is calculated from the concentration of methane in the landfill gas as measured by Method 3C. A minimum of three 30-minute Method 3C samples are determined. The measurement of other organic components, hydrogen, and carbon monoxide is not applicable. Method 3C may be used to determine the landfill gas molecular weight for calculating the flare gas exit velocity under 40 CFR 60.18(f)(4).

(1) Within 60 days after the date of completing each performance test (as defined in 40 CFR 60.8), the permittee shall submit the results of the performance tests, including any associated fuel analyses, required by 40 CFR 60.764(b) or (d) according to 40 CFR 60.767(i)(1).

(2) [*Reserved*]

[40 CFR 60.764(e)(1)-(2)].

II.B.2.a.2 **Recordkeeping:**

(a) The permittee shall maintain records required under 40 CFR Part 60.768(a)-(f), as they apply.

(b) Site-specific surface methane emissions demonstration. Landfill permittee seeking to demonstrate that site-specific surface methane emissions are below 500 parts per million by conducting surface emission monitoring under the Tier 4 procedures above shall keep 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 40 CFR Part 60, including all of the following items:

(1) Calibration records:

(i) Date of calibration and initials of operator performing the calibration.

(ii) Calibration gas cylinder identification, certification date, and certified concentration.

(iii) Instrument scale(s) used.

(iv) A description of any corrective action taken if the meter readout could not be adjusted to correspond to the calibration gas value.

(v) If a permittee makes their own calibration gas, a description of the procedure used.

(2) Digital photographs of the instrument setup, including the wind barrier. The photographs

shall 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.

(3) Timestamp of each surface scan reading:

(i) Timestamp should be detailed to the nearest second, based on when the sample collection begins.

(ii) A log for the length of time each sample was taken using a stopwatch (e.g., the time the probe was held over the area).

(4) Location of each surface scan reading. The permittee shall determine the coordinates using an instrument with an accuracy of at least 4 meters. Coordinates shall be in decimal degrees with at least five decimal places.

(5) Monitored methane concentration (parts per million) of each reading.

(6) Background methane concentration (parts per million) after each instrument calibration test.

(7) Adjusted methane concentration using most recent calibration (parts per million).

(8) For readings taken at each surface penetration, the unique identification location label matching the label specified in 40 CFR 60.768(d).

(9) Records of the operating hours of the gas collection system for each destruction device.

[40 CFR 60.768(g)]

(c) Collection and control system monitoring data. Except as provided in 40 CFR 60.767(c)(2), the permittee shall keep for at least 5 years up-to-date, readily accessible records of all collection and control system monitoring data for parameters measured in 40 CFR 60.766(a)(1), (2), and (3), as applies.

[40 CFR 60.768(h)]

(d) Electronic records. Any records required to be maintained by 40 CFR Part 60, Subpart XXX that are submitted electronically via the EPA's CDX may be maintained in electronic format.

[40 CFR 60.768(i)]

(e) Leachate or liquids addition. Permittees reporting leachate or other liquids addition under Reporting (k), shall 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.

[40 CFR 60.768(j)]

(f) Results of monitoring shall also be maintained in accordance with provision I.S.1 of this permit.

II.B.2.a.3 **Reporting:**

(a) NMOC emission rate report. The permittee shall submit an NMOC emission rate report following the procedure specified in paragraph (i)(2) below to the Director initially and annually thereafter, except as provided for in paragraph (a)(1)(ii) below. The Director may request such additional information as may be necessary to verify the reported NMOC emission rate.

[40 CFR 60.767(b)]

(1) The NMOC emission rate report shall contain an annual or 5-year estimate of the NMOC emission rate calculated using the formula and procedures provided in Monitoring (a)-(f) or (g), as applicable.

[40 CFR 60.767(b)(1)]

(i) The initial NMOC emission rate report shall be submitted no later than indicated in paragraphs (A) and (B) below. Subsequent NMOC emission rate reports shall be submitted annually thereafter, except as provided for in paragraph (a)(1)(ii) below.

[40 CFR 60.767(b)(1)(i)]

(A) November 28, 2016, for landfills that commenced construction, modification, or reconstruction after July 17, 2014, but before August 29, 2016, or

[40 CFR 60.767(b)(1)(i)(A)]

(B) Ninety days after the date of commenced construction, modification, or reconstruction for landfills that commence construction, modification, or reconstruction after August 29, 2016.

[40 CFR 60.767(b)(1)(i)(B)]

(ii) If the estimated NMOC emission rate as reported in the annual report to the Director is less than 34 megagrams per year in each of the next 5 consecutive years, the permittee may elect to submit, following the procedure specified in paragraph (i)(2) below, an estimate of the NMOC emission rate for the next 5-year period in lieu of the annual report. This estimate shall include the current amount of solid waste-in-place and the estimated waste acceptance rate for each year of the 5 years for which an NMOC emission rate is estimated. All data and calculations upon which this estimate is based shall be provided to the Director. 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 Director. 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.

[40 CFR 60.767(b)(1)(ii)]

(2) The NMOC emission rate report shall include all the data, calculations, sample reports and measurements used to estimate the annual or 5-year emissions.

[40 CFR 60.767(b)(2)]

(3) Each permittee subject to the requirements of this subpart is exempted from the

requirements to submit an NMOC emission rate report, after installing a collection and control system that complies with 40 CFR 60.762(b)(2), during such time as the collection and control system is in operation and in compliance with 40 CFR 60.763 and 40 CFR 60.765.

[40 CFR 60.767(b)(3)]

(b) *Reserved*.

(c) Collection and control system design plan. Each permittee subject to Condition (a)(2) shall submit a collection and control system design plan to the Director for approval according to the schedule in paragraph (c)(4) below. The collection and control system design plan shall be prepared and approved by a professional engineer and shall meet the following requirements:

(1) The collection and control system as described in the design plan shall meet the design requirements in 40 CFR 60.762(b)(2).

[40 CFR 60.767(c)(1)]

(2) The collection and control system design plan shall include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions of 40 CFR 60.763 through 60.768 proposed by the permittee.

[40 CFR 60.767(c)(2)]

(3) The collection and control system design plan shall either conform with specifications for active collection systems in 40 CFR 60.769 or include a demonstration to the Director 's satisfaction of the sufficiency of the alternative provisions to 40 CFR 60.769.

[40 CFR 60.767(c)(3)]

(4) Each permittee of an MSW landfill having a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters shall submit a collection and control system design plan to the Director 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, except as follows:

(i) If the permittee elects to recalculate the NMOC emission rate after Tier 2 NMOC sampling and analysis as provided in Monitoring (c) above, and the resulting rate is less than 34 megagrams per year, annual periodic reporting shall 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. The revised NMOC emission rate report, with the recalculated emission rate based on NMOC sampling and analysis, shall be submitted, following the procedures in paragraph (i)(2) below, within 180 days of the first calculated exceedance of 34 megagrams per year.

(ii) If the permittee elects to recalculate the NMOC emission rate after determining a site-specific methane generation rate constant k, as provided in Tier 3 of Monitoring (d), and the resulting NMOC emission rate is less than 34 Mg/yr, annual periodic reporting shall be resumed. The resulting site-specific methane generation rate constant k shall 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 Tier 3 of Monitoring (d) and the resulting site-specific methane generation rate constant k shall be submitted, following the procedure specified in paragraph (i)(2) below, to the Director within 1 year of the first calculated emission rate equaling or exceeding 34 megagrams per year.

(iii) If the permittee elects to demonstrate that site-specific surface methane emissions are below 500 parts per million methane, based on the provisions of Tier 4 of Monitoring (f), then the permittee shall submit annually a Tier 4 surface emissions report as specified in this paragraph following the procedure specified in paragraph (i)(2) below until surface emissions readings of 500 parts per million methane or greater is found. If the Tier 4 surface emissions report shows no surface emissions readings of 500 parts per million methane or greater for four consecutive quarters at a closed landfill, then the landfill permittee may reduce Tier 4 monitoring from a quarterly to an annual frequency. The Director may request such additional information as may be necessary to verify the reported instantaneous surface emission readings. The Tier 4 surface emissions report shall clearly identify the location, date and time (to nearest second), average wind speeds including wind gusts, and reading (in parts per million) of any value 500 parts per million methane or greater, other than non-repeatable, momentary readings. For location, the permittee shall determine the latitude and longitude coordinates using an instrument with an accuracy of at least 4 meters. The coordinates shall be in decimal degrees with at least five decimal places. The Tier 4 surface emission report shall also include the results of the most recent Tier 1 and Tier 2 results in order to verify that the landfill does not exceed 50 Mg/yr of NMOC.

(A) The initial Tier 4 surface emissions report shall 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) below.

(B) The Tier 4 surface emissions report shall 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) below.

[40 CFR 60.767(c)(4)]

(5) The landfill permittee shall notify the Director that the design plan is completed and submit a copy of the plan's signature page. The Director has 90 days to decide whether the design plan should be submitted for review. If the Director chooses to review the plan, the approval process continues as described in paragraph (c)(6) below. However, if the Director indicates that submission is not required or does not respond within 90 days, the landfill permittee can continue to implement the plan with the recognition that the permittee is proceeding at their own risk. In the event that the design plan is required to be modified to obtain approval, the permittee shall 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.

[40 CFR 60.767(c)(5)]

(6) Upon receipt of an initial or revised design plan, the Director shall review the information submitted under paragraphs (c)(1) through (3) above 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 Director does not approve or disapprove the design plan, or does not request that additional information be submitted within 90 days of receipt, then the permittee may continue with implementation of the design plan, recognizing they would be proceeding at their own risk.

[40 CFR 60.767(c)(6)]

(7) If the permittee chooses to demonstrate compliance with the emission control requirements using a treatment system as defined in 40 CFR Part 60, Subpart XXX, then the permittee shall prepare a site-specific treatment system monitoring plan as specified in 40 CFR 60.768(b)(5).

[40 CFR 60.767(c)(7)]

(d) Revised design plan. The permittee who has already been required to submit a design plan under paragraph (c) above, shall submit a revised design plan to the Director for approval as follows:

(1) At least 90 days before expanding operations to an area not covered by the previously approved design plan.

(2) 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 Director according to paragraph (c) above.

[40 CFR 60.767(d)]

(e) Closure report. Each permittee of a controlled landfill shall submit a closure report to the Director within 30 days of waste acceptance cessation. The Director may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 40 CFR 258.60. If a closure report has been submitted to the Director, no additional wastes may be placed into the landfill without filing a notification of modification as described under 40 CFR 60.7(a)(4).

[40 CFR 60.767(e)]

(f) Equipment removal report. The permittee shall submit an equipment removal report to the Director 30 days prior to removal or cessation of operation of the control equipment.

(1) The equipment removal report shall contain all of the following items:

(i) A copy of the closure report submitted in accordance with paragraph (e) above;

(ii) 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. In the equipment removal 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; and

(iii) 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. 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.

(2) The Director may request such additional information as may be necessary to verify that all of the conditions for removal in 40 CFR 60.762(b)(2)(v) have been met.

[40 CFR 60.767(f)].

(g) Annual report- Active collection systems: The permittee of a landfill seeking to comply with 40 CFR 60.762(b)(2) using an active collection system designed in accordance with 40 CFR 60.762(b)(2)(ii) shall submit to the Director, following the procedure specified in paragraph (i)(2) below, annual reports of the recorded information in paragraphs (g)(1) through (7) below. The initial annual report shall be submitted within 180 days of installation and startup of the collection and control system, and shall include the initial performance test report required under 40 CFR 60.8, as applicable, 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. For enclosed combustion devices and flares, reportable exceedances are defined under 40 CFR 60.768(c). If complying with the operational provisions of 40 CFR 63.1958, 63.1960, and 63.1961 of this chapter, as allowed at 40 CFR 60.762(b)(2)(iv), the permittee shall follow the semi-annual reporting requirements in 40 CFR 63.1981(h) in lieu of this paragraph.

(1) Value and length of time for exceedance of applicable parameters monitored under 40 CFR 60.766(a), (b), (c), (d), and (g).

(2) Description and duration of all periods when the gas stream was diverted from the control device or treatment system through a bypass line or the indication of bypass flow as specified under 40 CFR 60.766.

(3) Description and duration of all periods when the control device or treatment system was not operating and length of time the control device or treatment system was not operating.

(4) All periods when the collection system was not operating.

(5) The location of each exceedance of the 500 parts per million methane concentration as provided in 40 CFR 60.763(d) and the concentration recorded at each location for which an exceedance was recorded in the previous month. For location, the permittee shall determine the latitude and longitude coordinates using an instrument with an accuracy of at least 4 meters. The coordinates shall be in decimal degrees with at least five decimal places.

(6) The date of installation and the location of each well or collection system expansion added pursuant to 40 CFR 60.765(a)(3), (a)(5), (b), and (c)(4).

(7) For any corrective action analysis for which corrective actions are required in 40 CFR 60.765(a)(3) or (5) and that take more than 60 days to correct the exceedance, 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 or elevated temperature reading, and, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates.

[40 CFR 60.767(g)(1)-(7)]

(h) Initial performance test report- Control systems: Each permittee seeking to comply with 40 CFR 60.762(b)(2)(iii) shall include the following information with the initial performance test report required under 40 CFR 60.8:

(1) 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;
(2) 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;

(3) 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;

(4) The sum of the gas generation flow rates for all areas from which collection wells have been excluded based on nonproductivity and the calculations of gas generation flow rate for each excluded area;

(5) The provisions for increasing gas mover equipment capacity with increased gas generation flow rate, if the present gas mover equipment is inadequate to move the maximum flow rate expected over the life of the landfill; and

(6) The provisions for the control of off-site migration.

[40 CFR 60.767(h)(1)-(6)]

(i) Electronic reporting. The permittee shall submit reports electronically according to paragraphs (i)(1) and (2) below.

(1) Within 60 days after the date of completing each performance test (as defined in 40 CFR 60.8), the permittee shall submit the results of each performance test according to the following procedures:

(i) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT Web site (https://www3.epa.gov/ttn/chief/ert/ert_info.html) at the time of the test, the permittee shall submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (https://cdx.epa.gov/). Performance test data shall be submitted in a file format generated through the use of the EPA's ERT or an alternative file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT Web site, once the XML schema is available. If the permittee claims that some of the performance test information being submitted is confidential business information (CBI), the permittee shall submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT Web site, including information claimed to be CBI, on a compact disc, flash drive or other commonly used electronic storage media to the EPA. The electronic media shall be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention:

Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted shall be submitted to the EPA via the EPA's CDX as described earlier in this paragraph.

(ii) For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT Web site at the time of the test, the permittee shall submit the results of the performance test to the Director at the appropriate address listed in 40 CFR 60.4.

(2) Permittees required to submit reports following the procedure specified in this paragraph shall submit reports to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) The permittee shall use the appropriate electronic report in CEDRI for this subpart or an alternate electronic file format consistent with the XML schema listed on the CEDRI Web site (https://www3.epa.gov/ttn/chief/cedri/index.html). If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the permittee shall submit the report to the Director at the appropriate address listed in 40 CFR 60.4. Once the form has been available in CEDRI for 90 calendar days, the permittee shall begin submitting all subsequent reports via CEDRI. The reports shall be submitted by the deadlines specified in this subpart, regardless of the method in which the reports are submitted.

[40 CFR 60.767(i)]

(j) Corrective action and the corresponding timeline (gas collection systems): The permittee shall submit reports according to paragraphs (j)(1) and (2) below. If complying with the operational provisions of 40 CFR 63.1958, 63.1960, and 63.1961 of this chapter, as allowed at 40 CFR 60.762(b)(2)(iv), the permittee shall follow the corrective action and the corresponding timeline requirements in 40 CFR 63.1981(j) in lieu of this paragraph.

(1) For corrective action that is required according to 40 CFR 60.765(a)(3)(iii) or (a)(5)(iii) and is expected to take longer than 120 days after the initial exceedance to complete, the permittee shall submit the root cause analysis, corrective action analysis, and corresponding implementation timeline to the Director 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 Director shall approve the plan for corrective action and the corresponding timeline. [40 CFR 60.767(j)(1)]

(2) For corrective action that is required according to 40 CFR 60.765(a)(3)(iii) or (a)(5)(iii) and is not completed within 60 days after the initial exceedance, the permittee shall submit a notification to the Director as soon as practicable but no later than 75 days after the first measurement of positive pressure or temperature exceedance. [40 CFR 60.767(j)(2)]

(k) Liquids addition. The permittee of an affected landfill with a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters that has employed 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 shall submit to the Director, annually, following the procedure specified in paragraph (i)(2) above, the following information:

(1) Volume of leachate recirculated (gallons per year) and the reported basis of those estimates (records or engineering estimates).

(2) Total volume of all other liquids added (gallons per year) and the reported basis of those

estimates (records or engineering estimates).

(3) Surface area (acres) over which the leachate is recirculated (or otherwise applied).

(4) Surface area (acres) over which any other liquids are applied.

(5) The total waste disposed (megagrams) in the areas with recirculated leachate and/or added liquids based on on-site records to the extent data are available, or engineering estimates and the reported basis of those estimates.

(6) The annual waste acceptance rates (megagrams per year) in the areas with recirculated leachate and/or added liquids, based on on-site records to the extent data are available, or engineering estimates.

(7) The initial report shall contain items in paragraph (k)(1) through (6) above 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 shall be submitted no later than:

(i) 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

(ii) 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 August 29, 2016.

(8) Subsequent annual reports shall contain items in paragraph (k)(1) through (6) above for the 365-day period following the 365-day period included in the previous annual report, and the report shall be submitted no later than 365 days after the date the previous report was submitted.

(9) Landfills may cease annual reporting of items in paragraphs (k)(1) through (7) above once they have submitted the closure report in paragraph (e) above.

[40 CFR 60.767(k)]

(l) Tier 4 notification.

(1) The permittee of an affected landfill with a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters shall 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 Monitoring (f). The landfill shall also include a description of the wind barrier to be used during the SEM in the notification. Notification shall be postmarked not less than 30 days prior to such date.

(2) If there is a delay to the scheduled Tier 4 SEM date due to weather conditions, including not meeting the wind requirements in Monitoring (f)(iii)(A), the permittee of a landfill shall notify the Director 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 Director by mutual agreement.

[40 CFR 60.757(l)]

(m) Each permittee that chooses to comply with the provisions in 40 CFR 63.1958, 63.1960, and 63.1961, as allowed at 40 CFR 60.762(b)(2)(iv), shall submit the 24-hour high temperature report according to 40 CFR 63.1981(k).

(n) There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.3 **Conditions on LFG Generator Engine**

II.B.3.a **Condition:**

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected emission unit, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [Origin: DAQE-AN101290026-22]. [R307-401-4]

II.B.3.a.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.3.a.2 **Recordkeeping:**

Permittee shall document activities performed to assure proper operation and maintenance. Records shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.3.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.3.b **Condition:**

Visible emissions shall not exceed 10% opacity. [Origin: DAQE-AN101290026-22]. [R307- 401-8]

II.B.3.b.1 **Monitoring:**

If an affected emission unit is operated during a calendar quarter, an opacity observation of the emission unit shall be performed in the quarter that the emission unit was operated. The opacity observation can be conducted at any time during the quarter. The opacity observation shall be conducted by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9, while the emission unit is operating. If visible emissions other than condensed water vapor are observed from the emission unit, an opacity determination of that emission unit shall be performed by a certified observer within 24 hours of the initial visual emission observation. The opacity determination shall be performed in accordance with 40 CFR 60, Appendix A, Method 9.

II.B.3.b.2 **Recordkeeping:**

The permittee shall keep a log which includes the location and description of the emission unit. For each quarter, the log shall include either the date of the opacity observation and if visual emission other than condensed water vapor were observed or a note that the emission unit was not operated. For each observed visual emission other than condensed water vapor the permittee shall record: date and time of visual emission observation, emission unit location and description,

time and date of opacity determination, and percent opacity. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.3.b.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.3.c **Condition:**

Emissions of NO_x shall not exceed the following rates:

Pollutant	g/hp-hr	lb/hr
NO_x	0.5	2.46

[Origin: DAQE-AN101290026-22]. [R307-401-8]

II.B.3.c.1 **Monitoring:**

Stack testing shall be performed as specified below:

(a) Frequency - The permittee shall conduct an initial test within180 days after the start-up of the emission unit. Thereafter, compliance tests shall be conducted every 8,760 hours of operation, or once every three (3) years, whichever comes first. The Director may require testing at any time.

(b) Notification - The permittee shall notify the Director At least 30 days prior to conducting any required emission testing. A source test protocol shall be submitted to DAQ when the testing notification is submitted to the Director. The source test protocol shall be approved by the Director prior to performing the test(s). The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. A pretest conference shall be held if directed by the Director.

(c) Sample Location
The emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other EPA approved testing methods acceptable to the Director. An Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.

(d) Methods

(1) Volumetric Flow Rate
40 CFR 60, Appendix A, Method 2, Method 19 or other EPA approved testing methods acceptable to the Director.

(2) Nitrogen Oxides (NO_x)
40 CFR 60, Appendix A, Method 7, 7A, 7B, 7C, 7D or 7E, or other EPA approved testing methods acceptable to the Director.

(e) Calculations
To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Director, to give the results in the specified

units of the emission limitation.

(f) New Source Operation
For a new source/emission point, the combustion rate during all compliance testing shall be no less than 90% of the capacity listed in Section II.A.4 of DAQE-AN101290026-22. If the maximum allowable combustion rate in Section II.A.4 of DAQE-AN101290026-22. has not been achieved at the time of the test, the following procedure shall be followed:

(1) Testing shall be at no less than 90% of the combustion rate achieved to date.

(2) If the test is passed, the new maximum allowable combustion rate shall be 110% of the tested achieved rate, but not more than the maximum allowable combustion rate. This new allowable maximum combustion rate shall remain in effect until successfully tested at a higher rate.

(3) The permittee shall request a higher combustion rate when necessary. Testing at no less than 90% of the higher rate shall be conducted. A new maximum combustion rate (110% of the new rate) will then be allowed if the test is successful. This process may be repeated until the maximum combustion rate in Section II.A.4 of DAQE-AN101290026-22 is achieved.

(g) Existing Source
For an existing source/emission point, the production rate during all compliance testing shall be no less than 90% of the maximum production rate achieved in the previous three (3) years.

II.B.3.c.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.3.c.3 **Reporting:**

Results of required stack testing shall be submitted to the Director within 60 days after the test has been completed. [R307-165]

There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.3.d **Condition:**

Emissions of CO shall not exceed the following rates:

Pollutant	g/hp-hr	lb/hr
CO	2.5	12.31

[Origin: DAQE-AN101290026-22]. [R307-401-8]

II.B.3.d.1 **Monitoring:**

Stack testing shall be performed as specified below:

(a) Frequency - The permittee shall conduct an initial test within180 days after the start-up of the emission unit. Thereafter, compliance tests shall be conducted every 8,760 hours of operation, or once every three (3) years, whichever comes first. The Director may require testing at any time.

(b) Notification - The permittee shall notify the Director At least 30 days prior to conducting any required emission testing. A source test protocol shall be submitted to DAQ when the testing notification is submitted to the Director. The source test protocol shall be approved by the Director prior to performing the test(s). The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. A pretest conference shall be held if directed by the Director.

(c) Sample Location
The emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other EPA approved testing methods acceptable to the Director. An Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.

(d) Methods

(1) Volumetric Flow Rate
40 CFR 60, Appendix A, Method 2, Method 19 or other EPA approved testing methods acceptable to the Director.

(2) Carbon Monoxide (CO)
40 CFR 60, Appendix A, Method 10, or other EPA approved testing methods acceptable to the Director.

(e) Calculations
To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Director, to give the results in the specified units of the emission limitation.

(f) New Source Operation
For a new source/emission point, the combustion rate during all compliance testing shall be no less than 90% of the capacity listed in Section II.A.4 of DAQE-AN101290026-22. If the maximum allowable combustion rate in Section II.A.4 of DAQE-AN101290026-22. has not been achieved at the time of the test, the following procedure shall be followed:

(1) Testing shall be at no less than 90% of the combustion rate achieved to date.

(2) If the test is passed, the new maximum allowable combustion rate shall be 110% of the tested achieved rate, but not more than the maximum allowable combustion rate. This new allowable maximum combustion rate shall remain in effect until successfully tested at a higher rate.

(3) The permittee shall request a higher combustion rate when necessary. Testing at no less than 90% of the higher rate shall be conducted. A new maximum combustion rate (110% of the new rate) will then be allowed if the test is successful. This process may be repeated until the maximum combustion rate in Section II.A.4 of DAQE-AN101290026-22 is achieved.

(g) Existing Source
For an existing source/emission point, the production rate during all compliance testing shall be no less than 90% of the maximum production rate achieved in the previous three (3) years.

II.B.3.d.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.3.d.3 **Reporting:**

Results of required stack testing shall be submitted to the Director within 60 days after the test has been completed. [R307-165]

There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.3.e **Condition:**

Emissions of VOC shall not exceed the following rates:

Pollutant	g/hp-hr	lb/hr
VOC	0.88	4.33

[Origin: DAQE-AN101290026-22]. [R307-401-8]

II.B.3.e.1 **Monitoring:**

Stack testing shall be performed as specified below:

(a) Frequency - The permittee shall conduct an initial test within180 days after the start-up of the emission unit. Thereafter, compliance tests shall be conducted every 8,760 hours of operation, or once every three (3) years, whichever comes first. The Director may require testing at any time.

(b) Notification - The permittee shall notify the Director At least 30 days prior to conducting any required emission testing. A source test protocol shall be submitted to DAQ when the testing notification is submitted to the Director. The source test protocol shall be approved by the Director prior to performing the test(s). The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. A pretest conference shall be held if directed by the Director.

(c) Sample Location
The emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other EPA approved testing methods acceptable to the Director. An Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.

(d) Methods

(1) Volumetric Flow Rate
40 CFR 60, Appendix A, Method 2, Method 19 or other EPA approved testing methods acceptable to the Director.

(2) Volatile Organic Carbon (VOC)
40 CFR 60, Appendix A, Method 18, 25, 25A, 40 CFR 63 Appendix A Method 320 or other EPA approved testing method, as acceptable to the Director.

(e) Calculations
To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by

the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Director, to give the results in the specified units of the emission limitation.

(f) New Source Operation
For a new source/emission point, the combustion rate during all compliance testing shall be no less than 90% of the capacity listed in Section II.A.4 of DAQE-AN101290026-22. If the maximum allowable combustion rate in Section II.A.4 of DAQE-AN101290026-22. has not been achieved at the time of the test, the following procedure shall be followed:

(1) Testing shall be at no less than 90% of the combustion rate achieved to date.

(2) If the test is passed, the new maximum allowable combustion rate shall be 110% of the tested achieved rate, but not more than the maximum allowable combustion rate. This new allowable maximum combustion rate shall remain in effect until successfully tested at a higher rate.

(3) The permittee shall request a higher combustion rate when necessary. Testing at no less than 90% of the higher rate shall be conducted. A new maximum combustion rate (110% of the new rate) will then be allowed if the test is successful. This process may be repeated until the maximum combustion rate in Section II.A.4 of DAQE-AN101290026-22 is achieved.

(g) Existing Source
For an existing source/emission point, the production rate during all compliance testing shall be no less than 90% of the maximum production rate achieved in the previous three (3) years.

II.B.3.e.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.3.e.3 **Reporting:**

Results of required stack testing shall be submitted to the Director within 60 days after the test has been completed. [R307-165]

There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.3.f **Condition:**

(1) Except as specified in paragraph (2) of this condition, the permittee of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) shall comply with the emission standards in Table 1 to this subpart for their stationary SI ICE. [40 CFR 60.4233(e)]

(2) After July 1, 2009, the permittee may not install stationary SI ICE with a maximum engine power of greater than or equal to 500 HP that do not meet the applicable requirements in 40 CFR 60.4233, except as specified in 40 CFR 60.4236(e). [40 CFR 60.4236(b)]

(3) The air-to-fuel ratio controller shall be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times. [40 CFR 60.4243(g)]

(4) The permittee shall operate and maintain stationary SI ICE that achieve the emission standards as

required in 40 CFR 60.4233 over the entire life of the engine. [40 CFR 60.4234]

(5) The permittee shall comply with the applicable general provisions in 40 CFR 60.1-19 (40 CFR 60 Subpart A) as identified in Table 3 of 40 CFR 60 Subpart JJJJ. [40 CFR 60.4246 and 40 CFR 60 Subpart JJJJ Table 3]

[Origin: 40 CFR 60 Subpart JJJJ]. [40 CFR 60.4230, 40 CFR 60.4233(e), 40 CFR 60.4234, 40 CFR 60.4236(b), 40 CFR 60.4243(g), 40 CFR 60.4246, 40 CFR 63 Subpart ZZZZ]

II.B.3.f.1 **Monitoring:**

(a) The permittee shall demonstrate compliance according to one of the methods specified in (a)(1) and (2) of this section.

(1) Purchasing an engine certified according to procedures specified in 40 CFR 60 Subpart JJJJ, for the same model year and demonstrating compliance according to one of the methods specified in paragraph 40 CFR 60.4243(a). [40 CFR 60.4243(b)(1)]

(2) Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in 40 CFR 60.4233(d) or (e), and according to the requirements specified in 40 CFR 60.4244, as applicable, and according to paragraph (a)(2)(i) of this section. [40 CFR 60.4243(b)(2)]

(i) The permittee of a stationary SI internal combustion engine greater than 500 HP, shall keep a maintenance plan and records of conducted maintenance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the permittee shall conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance. [40 CFR 60.4243(b)(2)(iii)]

The permittee shall comply with the applicable general provisions in 40 CFR 60.1-19 as identified in Table 3 of 40 CFR 60 Subpart JJJJ. [40 CFR 60.4246]

II.B.3.f.2 **Recordkeeping:**

The permittee shall keep records of the following:

(a) All notifications submitted to comply with this subpart and all documentation supporting any notification. [40 CFR 60.4245(a)(1)]

(b) Maintenance conducted on the engine. [40 CFR 60.4245(a)(2)]

(c) If the permittee operates and maintains a certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, the permittee shall keep records of conducted maintenance to demonstrate compliance. [40 CFR 60.4243(a)(1)]

(d) If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 1048, 1054, and 1060, as applicable. [40 CFR 60.4245(a)(3)]

(e) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to 40 CFR 60.4243(a)(2), documentation that

the engine meets the emission standards. [40 CFR 60.4245(a)(4)]

The permittee shall comply with the applicable general provisions in 40 CFR 60.1-19 as identified in Table 3 of 40 CFR 60 Subpart JJJJ. [40 CFR 60.4246]

Records shall be maintained as described in Provision I.S.1 of this permit.

II.B.3.f.3 **Reporting:**

If the permittee installs an engine that has not been certified by the engine manufacturer to meet the emission standards in 40 CFR 60.4231, the permittee shall submit an initial notification as required in 40 CFR 60.7(a)(1) and shall include the information in 40 CFR 60.4245(c)(1) through (5). [40 CFR 60.4245(c)]

The permittee shall submit reports according 40 CFR 60.4245(d) as applicable.

The permittee shall comply with the applicable general reporting provisions in 40 CFR 60.1-19 as identified in Table 3 of 40 CFR 60 Subpart JJJJ. [40 CFR 60.4246]

There are no additional reporting requirements for this provision except those that are specified in Section I of this permit.

II.B.4 **Conditions on Enclosed Flares**

II.B.4.a **Condition:**

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected emission unit, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [Origin: DAQE-AN101290026-22]. [R307-401-4]

II.B.4.a.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.4.a.2 **Recordkeeping:**

Permittee shall document activities performed to assure proper operation and maintenance. Records shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.4.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.4.b **Condition:**

Visible emissions shall not exceed 20% opacity from the enclosed flares. [Origin: DAQE-AN101290026-22]. [R307-201-1(2)]

II.B.4.b.1 **Monitoring:**

If an affected emission unit is operated during a calendar quarter, an opacity observation of the emission unit shall be performed in the quarter that the emission unit was operated. The opacity observation can be conducted at any time during the quarter. The opacity observation shall be conducted by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9, while the emission unit is operating. If visible emissions other than condensed water vapor are observed from the emission unit, an opacity determination of that emission unit shall be performed by a certified observer within 24 hours of the initial visual emission observation. The opacity determination shall be performed in accordance with 40 CFR 60, Appendix A, Method 9.

II.B.4.b.2 **Recordkeeping:**

The permittee shall keep a log which includes the location and description of the emission unit. For each quarter, the log shall include either the date of the opacity observation and if visual emission other than condensed water vapor were observed or a note that the emission unit was not operated. For each observed visual emission other than condensed water vapor the permittee shall record: date and time of visual emission observation, emission unit location and description, time and date of opacity determination, and percent opacity. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.4.b.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.5 **Conditions on Emergency NG Fired Backup Generator**

II.B.5.a **Condition:**

Visible emissions shall not exceed 10% opacity. [Origin: DAQE-AN101290026-22]. [R307-401-8]

II.B.5.a.1 **Monitoring:**

If an affected emission unit is operated during a calendar quarter, an opacity observation of the emission unit shall be performed in the quarter that the emission unit was operated. The opacity observation can be conducted at any time during the quarter. The opacity observation shall be conducted by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9, while the emission unit is operating. If visible emissions other than condensed water vapor are observed from the emission unit, an opacity determination of that emission unit shall be performed by a certified observer within 24 hours of the initial visual emission observation. The opacity determination shall be performed in accordance with 40 CFR 60, Appendix A, Method 9.

II.B.5.a.2 **Recordkeeping:**

The permittee shall keep a log which includes the location and description of the emission unit. For each quarter, the log shall include either the date of the opacity observation and if visual emission other than condensed water vapor were observed or a note that the emission unit was not operated. For each observed visual emission other than condensed water vapor the permittee shall record: date and time of visual emission observation, emission unit location and description, time and date of opacity determination, and percent opacity. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in

accordance with Provision I.S.1 of this permit.

II.B.5.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.5.b **Condition:**

The permittee shall comply with the following operating limitations at all times for the affected emission unit:

(1) The permittee shall operate the affected emission unit according to the requirements in paragraphs 1.a through 1.c. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in 1.a through 1.c, is prohibited. If the engine is not operated in accordance with paragraphs 1.a through 1.c, it will not be considered an emergency engine and shall meet all requirements for non-emergency engines.

(a) There is no time limit on engine use for emergency situations.

(b) The permittee may operate the emergency engine for the purposes specified in paragraphs (b)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (c) below counts as part of the 100 hours per calendar year allowed under this paragraph (b).

(i) Operation for the purpose of maintenance checks and readiness testing is limited to 100 hours per year, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. A petition for approval of additional hours to be used for maintenance checks and readiness testing is not required if the permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year.

(c) The emergency engine may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in paragraph (b) above. Except as provided in 40 CFR 63.6640(f)(4)(i) and (ii) the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(2) The permittee shall meet the following requirements at all times, except during periods of startup:

(a) Change oil and filter every 500 hours of operation or annually, whichever comes first, or utilizing an oil analysis program as described under 40 CFR 63.6625(j) in order to extend the oil change requirement;

(b) Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary;

(c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. During periods of startup, the permittee shall minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for appropriate and safe

loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.

(3) The permittee shall comply with the applicable general provisions in 40 CFR 63.1-15 as identified in Table 8 of 40 CFR 63 Subpart ZZZZ.

[Origin: 40 CFR 63 Subpart ZZZZ]. [40 CFR 63.6595(a)(1), 40 CFR 63.6603(a), 40 CFR 63.6605(a), 40 CFR 63.6625(h), 40 CFR 63.6640(f), 40 CFR 63.6665, 40 CFR 63 Subpart ZZZZ Table 2d, 40 CFR 63 Subpart ZZZZ Table 8]

II.B.5.b.1 **Monitoring:**

The permittee shall install a non-resettable hour meter if one is not already installed. [40 CFR 63.6625(f)]

If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the required schedule, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice shall be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. [40 CFR 63 Subpart ZZZZ Table 2d Footnote [2]]

The permittee shall demonstrate continuous compliance by operating and maintaining the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written operation and maintenance instructions or develop and follow their own maintenance plan which shall provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 63.6625(e), 40 CFR 63.6640(a), 40 CFR 63 Subpart ZZZZ Table 6]

The permittee shall comply with the applicable general provisions in 40 CFR 63.1-15 as identified in Table 8 of 40 CFR 63 Subpart ZZZZ. [40 CFR 63.6665]

II.B.5.b.2 **Recordkeeping:**

The permittee shall keep the records described in 40 CFR 63.6655(a)(1)-(5) as applicable. [40 CFR 63.6655(a)].

For each affected emission unit that does not meet the standards applicable to non-emergency engines, the permittee shall:

(i) Keep records of the hours of operation of the engine that are recorded through the non-resettable hour meter.

(ii) The permittee shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.

(iii) If the engine is used for the purpose specified in 40 CFR 63.6640(f)(4)(ii), the permittee shall keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for this purpose. [40 CFR 63.6655(f)]

If additional hours are to be used for maintenance checks and readiness testing, the permittee shall maintain records indicating that Federal, State, or local standards require maintenance and

testing of emergency RICE beyond 100 hours per year. [40 CFR 63.6640(f)(2)(i)]

The permittee shall keep records that demonstrate continuous compliance with each applicable operating limitation [including, but not limited to, the manufacturer's emission-related operation and maintenance instructions or the permittee-developed maintenance plan]. [40 CFR 63.6655(d), 40 CFR 63 Subpart ZZZZ Table 6]

Records of the maintenance conducted shall be kept in order to demonstrate that the permittee operated and maintained the affected emission unit and after-treatment control device (if any) according to their own maintenance plan. [40 CFR 63.6655(e)]

The permittee shall comply with the applicable general provisions in 40 CFR 63.1-15 as identified in Table 8 of 40 CFR 63 Subpart ZZZZ. [40 CFR 63.6665].

Records shall be maintained in accordance with 40 CFR 63.6660 and Provision I.S.1 of this permit.

II.B.5.b.3 **Reporting:**

The permittee shall report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable. [40 CFR 63 Subpart ZZZZ Table 2d Footnote [2]]

The permittee shall report each instance in which it did not meet an applicable operating limitation in 40 CFR 63 Subpart ZZZZ Table 2d. These instances are deviations from the operating limitations. These deviations shall be reported according to the requirements in 40 CFR 63.6650. [40 CFR 63.6640(b)]

The permittee shall submit each report in 40 CFR 63 Subpart ZZZZ Table 7 as applicable. [40 CFR 63.6650(a)]

For emergency stationary RICE that operate for the purpose specified in 40 CFR 63.6640(f)(4)(ii) the permittee shall submit an annual report according to the requirements in 40 CFR 63.6650(h)(2)-(3) that contains the information required in 40 CFR 63.6650(h)(1). [40 CFR 63 Subpart ZZZZ Table 7.4.a]

The permittee shall comply with the applicable general provisions in 40 CFR 63.1-15 as identified in 40 CFR 63 Subpart ZZZZ Table 8. [63.6665]. The permittee shall also report each instance in which it did not meet the applicable requirements in Table 8. [40 CFR 63.6640(e)]

There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.5.c **Condition:**

At all times the permittee shall operate and maintain the affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [Origin: 40 CFR 63.6595(a)(1), 40 CFR 63.6605(b)]. [40 CFR 63 Subpart ZZZZ]

II.B.5.c.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.5.c.2 **Recordkeeping:**

The permittee shall keep the records described in 40 CFR 63.6655(a)(1)-(5) as applicable. [40 CFR 63.6655(a)] The permittee shall document activities performed to assure proper operation and maintenance. Records shall be maintained in accordance with 40 CFR 63.6660 and Provision I.S.1 of this permit.

II.B.5.c.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.5.d **Condition:**

The permittee shall perform maintenance and testing of the emergency generator engine in accordance with the following:

(1) The permittee shall not operate the engines for maintenance and testing operations before 6:00 AM or after 6:00 PM each day;

(2) The permittee shall not test the generator more than once per week.

[Origin: DAQE-AN101290026-22]. [R307-401-8]

II.B.5.d.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.5.d.2 **Recordkeeping:**

To determine compliance with the maintenance and testing requirements, the permittee shall record the following:

(a) Date;

(b) Time of day; and

(c) Day of the week that the maintenance and testing was performed.

The permittee shall maintain records of the maintenance and testing on a daily basis and in accordance with Provision I.S.1 of this permit.

II.B.5.d.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.C **Emissions Trading**
(R307-415-6a(10))

Not applicable to this source.

II.D **Alternative Operating Scenarios**.
(R307-415-6a(9))

Not applicable to this source.

II.E **Source-specific Definitions**.

There are no source-specific definitions for this permit.

SECTION III: PERMIT SHIELD

III.A A permit shield was not granted for any specific requirements.

SECTION IV: ACID RAIN PROVISIONS

IV.A **This source is not subject to Title IV. This section is not applicable.**

REVIEWER COMMENTS

This operating permit incorporates all applicable requirements contained in the following documents:

Incorporates DAQE-AN101290026-22 dated August 12, 2022

1. Comment on item originating in R307-307 regarding Permitted Source

   Comment regarding Salting and Sanding Requirements: R307-307 requires that any person who applies salt, crushed slag or sand to roads in Davis County shall maintain records of material applied as outlined in the permit. It also requires the salt to be at least 92% sodium chloride (NaCl) unless they vacuum sweep every arterial roadway within three days of the end of the storm. Since WIWMD does not salt or sand any roadways that meet the definition of arterial as shown on the Ogden Urbanized Area map specified in the rule, they are not subject to the 92% limit. Records of salt and sand quantity and percent by weight are not to be used for determining compliance because R307-307-1 has no limit on the quantity applied or specification of the percent by weight. WIWMD shall comply with R307-309 by maintaining a Fugitive Dust Control Plan and with strategies to control road fugitive dust. [Comment last updated on 10/21/2022 February 15, 2024]

2. Comment on item originating in this permit regarding Permitted Source

   Historical Comment: Fuel sulfur requirement: R307-203-1(1) requires that any oil shall contain no more than 0.85 lb sulfur per million gross BTU. The grade #1 or #2 fuel oil requirement in the subject approval order is the best available control technology requirement and is more stringent then the fuel sulfur content requirement of R307-203-1(1). Therefore, only the grade #1 or #2 fuel oil requirement will be included in the Title V permit since it is more stringent than R307-203-1. In addition, since #1 or #2 fuel oil meets the sulfur requirement by definition, records of gross heating value and density as specified in R307-203-1(1)(a) are not necessary and will not be recorded. Alternative monitoring is allowed by R307-203. [Last updated February 15, 2024]

3. Comment on item originating in this permit regarding Permitted Source

   Historical Comment: R307-201-1(2) does not apply to municipal waste combustors: R307-201-1(2) specifically exempts incinerators from visible emission limitations assigned pursuant to R307-201. The incinerators are subject to a visible emission limitation of 10% under state rule R307-223. [Comment last updated on 5/09/2002]

   *Update: The municipal waste combustor has been removed from this permit. [Last updated February 15, 2024]

4. Comment on item originating in this permit regarding Permitted Source

   Historical Comment: Monitoring of Operations: 40 CFR 60.53 requires the permittee to record the daily feed rates and hours of operation for each incinerator. These requirements are included in the monitoring requirements for the limitations on total hours of operation and total waste feed rate from the approval order. [Comment last updated on 8/04/2005]

   *Update: The municipal waste combustor has been removed from this permit. [Last updated February 15, 2024]

5. Comment on item originating in this permit regarding Permitted Source

Historical Comment: Particulate Emission Requirements of 40 CFR 60 Subpart E Subsumed.: 40 CFR 60.53 requires the permittee to meet a PM emission limitation of 180 mg/dscm at 12% CO_2. The state plan and rule for Municipal Waste Combustors, and approval order require the permittee to meet a PM emission limitation of 27 mg/dscm at 7% O_2. The state plan and rule, and AO PM requirements are more stringent than the PM requirements of 40 CFR 60 Subpart E. Therefore, the

PM requirements of 40 CFR 60 Subpart E will be subsumed by the PM requirements of the state plan and rule, and AO. [Comment last updated on 8/04/2005]

*Update: The municipal waste combustor has been removed from this permit. [Last updated February 15, 2024]

6. Comment on item originating in this permit regarding Permitted Source

Historical Comment: Particulate Emission Requirements of 40 CFR 60 Subpart E Subsumed.: 40 CFR 60.53 requires the permittee to meet a PM emission limitation of 180 mg/dscm at 12% CO_2. The state plan and rule for Municipal Waste Combustors, and approval order require the permittee to meet a PM emission limitation of 27 mg/dscm at 7% O_2. The state plan and rule, and AO PM requirements are more stringent than the PM requirements of 40 CFR 60 Subpart E. Therefore, the PM requirements of 40 CFR 60 Subpart E will be subsumed by the PM requirements of the state plan and rule, and AO. [Comment last updated on 8/04/2005]

*Update: The municipal waste combustor has been removed from this permit. [Last updated February 15, 2024]

7. Comment on item originating in this permit regarding Permitted Source

Historical Comment: Application Emission Limits Under State Plan: The subject State Plan for municipal waste combustion units (MWCs) specifies emission standards for Class I and II MWCs. Class I MWCs are those located at a source with a municipal waste processing capacity greater than 250 tons per day. Class II MWCs are those located at a source with a municipal waste processing capacity less than or equal to 250 tons per day. Wasatch Energy Systems (WES) has municipal waste processing capacity greater than 250 tons per day. Therefore, WES is a Class I source. Only the Class I emission limits have been included in this permit.

The carbon monoxide (CO) and oxide of nitrogen (NO_x) emission limits for Class I sources are further broken down by MWC type (i.e., mass burn water-wall, mass burn refractory, etc.). The MWCs at WES are categorized as mass burn refractory because the MWCs don't have heat recovery in the furnace. Therefore, only the CO and NO_x emission limits for mass burn refractory units have been included in this permit. [Comment last updated on 5/29/2003]

*Update: The municipal waste combustor has been removed from this permit. [Last updated February 15, 2024]

8. Historical Comment regarding Emergency Engines: The following RICE engines included in this permit are for emergency use and are subject to 40 CFR Part 63, Subpart ZZZZ:

1. Emergency Diesel Engine: 2,628 hp, installed 2005 (new engine).
2. Emergency Diesel Fire Pump Engine: 231 hp, installed 1986 (existing engine).
3. Emergency Natural Gas Engine: 195 hp, 4-stroke, installed May 2006 (existing engine).

*Update: The 2,628 hp engine and the 231 hp engine have been removed from the facility and are not listed in the Approval Order DAQE- AN101290026-22.

*Update: The 195 hp engine listed in DAQE- AN101290026-22 is located outside of the berm of the landfill. Therefore, according to R307-415-4(3)(b) the engine is not required to be included in the Title V permit. However, in order to maintain consistency between the Title V permit and the Approval Order the Source has elected to include the 195 hp engine along with its applicable requirements in the Title V permit. [Last updated April 2, 2024]

9. Comment on an item originating in R307-415-4(3)(b) regarding Municipal Solid Waste Landfill

Title V requirements for area sources: In accordance with the referenced rule, because the landfill is the emission unit that causes the permittee to be subject to the operating permit program, only requirements applicable to the landfill have been included in the permit. Any requirements applicable to emission units not directly related to the landfill have not been included with the exception of the 195 hp engine listed above in Reviewer Comment 8. [Last updated February 29, 2024]

10. Comment on item originating in R307-309 regarding Permitted Source

Comment regarding R307-205, Fugitive Emission and Fugitive Dust sources: This rule does not apply to Wasatch because it is located in a PM_{10} nonattainment or maintenance area. The applicable rule is R307-309, which has been included in this permit. [Last updated February 15, 2024]

11. Comment on item originating in this permit regarding Permitted Source

Green House Gas (GHG) applicability has been reviewed and there are no GHG requirements included in this permit. [Last updated February 15, 2024]

12. Comment on item originating in this permit regarding Permitted Source

CAM applicability has been evaluated. There are no CAM requirements in this permit. [Last updated February 15, 2024]

13. Comment on item originating in this permit regarding 40 CFR 60 Subpart XXX

40 CFR 60 Subpart XXX applicability: 40 CFR 60 Subpart is triggered by modifications after July 17, 2014. Wasatch reported a change in design capacity on April 26, 2018. Therefore, the landfill is subject to 40 CFR 60 Subpart XXX. [Last updated February 15, 2024]

14. Comment on item originating in this permit regarding Permitted Source

NMOC emission rate: In late August 2023 WIWMD reported an NMOC emission rate of 22.86 tons per year for the year 2022. [Last updated February 15, 2024]

15. Comment on item originating in DAQE-AN101290026-22 regarding Permitted Source

Applicability of 40 CFR 63 Subpart AAAA: Although 40 CFR 63 Subpart AAAA is listed in DAQE-AN101290026-22, the facility is not subject to this subpart. The HAPs decreased below the major determination threshold when the energy recovery operations were removed as per Approval Order DAQE-AN101290023-18. Also, the landfill has less than 50 Mg/yr of NMOC, and does not have a bioreactor. A letter, DAQE-GN101290027-24 was issued by DAQ on February 29, 2024 stating that the facility is not subject to 40 CFR 63 Subpart AAAA. [Last updated March 15, 2024]

16. Comment on item originating in this permit regarding Landfill Gas (LFG) Generator Engine

Landfill Gas Generator Engine Rating: The rating for the Landfill Gas Generator Engine in the AO DAQE-AN101290026-22 is listed as 2,233 HP. However, the nameplate rating for the Landfill Gas Generator Engine is listed as 2,242 HP. [Last updated April 24, 2024]