



State of Utah

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DIVISION OF AIR QUALITY
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Director

15975

Title V Operating Permit

PERMIT NUMBER: 500105002

DATE OF PERMIT: October 28, 2024

Date of Last Revision: October 28, 2024

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

Name of Permittee:

City of Logan
Logan City Environmental Department
290 N 100 W
Logan, UT 84321

Permitted Location:

City of Logan - North Valley Landfill
14200 Stink Creek Road
North Clarkston, UT 84305

UTM coordinates: 412,870 m Easting, 4,649,201 m Northing
SIC code: 4953 (Refuse Systems)

By:

Bryce C. Bird, Director

Prepared By:

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ENFORCEABLE DATES AND TIMELINES

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

Annual Certification Due: April 15 of every calendar year that this permit is in force.

Renewal application due: April 28, 2029

Permit expiration date: October 28, 2029

Definition of “prompt”: written notification within 14 days.

ABSTRACT

The City of Logan operates the North Valley Landfill, a class I municipal solid waste (MSW) landfill source located in Cache County, Utah. North Valley Landfill began accepting non-hazardous municipal and commercial waste in December 2017. North Valley Landfill is subject to New Source Performance Standard (NSPS) - General Provisions (40 CFR 60 Subpart A) and Subpart XXX, Standards of Performance for Municipal Solid Waste Landfills That Commenced Construction, Reconstruction, or Modification After July 17, 2014. North Valley Landfill is a Title V area source required to submit a Title V application by 40 CFR Part 60 Subpart XXX.

OPERATING PERMIT HISTORY

Permit/Activity	Date Issued	Recorded Changes
Title V renewal application (Project #OPP0159750003)	10/28/2024	Changes: This renewal incorporates changes to federal and state rules, removes conditions not directly related to the landfill, and makes typographical corrections.
Title V initial application (Project #OPP0159750001)	12/18/2019	Changes: North Valley Landfill is a Title V area source required to submit a Title V application by 40 CFR Part 60 Subpart XXX

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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)). [R307-415-6f]

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

II.A.2 **MSW Landfill**
Approximately 133 acres Municipal Solid Waste (MSW) Landfill.

II.A.3 **Leachate Pond**
Leachate generated from the landfill is directed through piping to the leachate collection pond. No unit-specific applicable requirements.

II.A.4 **Misc. Tanks**
Includes a propane-fired backup generator, a propane-fired infrared tube heater, propane above ground storage tanks, and a diesel above ground storage tank. No unit-specific applicable requirements.

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 MSW Landfill**

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

- (1) Opacity caused by fugitive dust shall not exceed:
 - (a) 10% at the property boundary; and
 - (b) 20% on site.
- (2) The permittee shall submit a fugitive dust control plan to the director in accordance with R307-309-6.
- (3) Opacity requirements shall not apply when the wind speed exceeds 25 miles per hour if the owner or operator 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.
- (4) Wind speed shall be measured by an anemometer
- (5) Any person responsible for construction or maintenance of any existing road or having right-of-way easement or possessing the right to use the same, whose activities results in fugitive dust from the road, shall minimize fugitive dust to the maximum extent possible and in accordance with R307-309-6.

- (6) Unpaved Roads. Any person responsible for construction or maintenance of any new or existing unpaved road shall prevent, the maximum extent possible, the deposit of material from the unpaved road onto any intersecting paved road during construction or maintenance. Any person who deposits materials that may create fugitive dust on a public or private paved road shall clean the road promptly.

[Origin R307-309-5, R307-309-9]. [R307-309-5, R307-309-9]

II.B.1.a.1

Monitoring:

In lieu of monitoring via visible emissions observations, adherence to the current fugitive dust control plan approved by the Director shall be monitored to demonstrate that appropriate measures are being taken to control fugitive dust.

II.B.1.a.2

Recordkeeping:

A copy of the fugitive dust control plan shall be maintained on-site. 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 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:

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.

- (a) The permittee shall calculate a nonmethane organic compounds (NMOC) emission rate for the landfill using the procedures specified in 40 CFR 60.764. [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 NMOC emission report to the Director, except as provided for in 40 CFR 60.767(b)(1)(ii) [Origin: 40 CFR 60.762(b)(1)(i)]; and
- (ii) Recalculate the NMOC emission rate annually using the procedures specified in 40 CFR 60.764(a)(1) 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 must either: comply with paragraph (a)(2) below; calculate NMOC emissions using the next higher tier in 40 CFR 60.764; or conduct a surface emission monitoring (SEM) demonstration using the procedures specified in 40 CFR 60.764(a)(6). [Origin: 40 CFR 60.762(b)(1)(ii)(A)].
- (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:
- (i) Submit a collection and control system design plan prepared by a professional engineer to the Director within 1 year as specified in 40 CFR 60.767(c) or (d);

- (ii) calculate NMOC emissions using the next higher tier in 40 CFR 60.764;
 - (iii) or conduct a surface emission monitoring demonstration using the procedures specified in 40 CFR 60.764(a)(6). The collection and control system shall meet the requirements of 40 CFR 60.762(b)(2)(ii) and (iii). [Origin: 40 CFR 60.762(b)(2)(i)]
- (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:
- (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(b), 40 CFR 60.762(d)]. [40 CFR 60 Subpart XXX]

II.B.1.b.1

Monitoring:

The permittee shall monitor the NMOC emission rate by using the equations in 40 CFR 60.764 and following the four tiers process outlined in 40 CFR 60.764.

- (a) The permittee shall calculate the NMOC emission rate using either Equation 1 or Equation 2 of 40 CFR 60.764.
- (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 40 CFR 60.767(b), and shall recalculate the NMOC mass emission rate annually as required by 40 CFR 60.762(b). [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 permittee shall determine the site-specific NMOC concentration using the sampling procedures described in 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 40 CFR 60.767(i)(1). [40 CFR 60.764(a)(3)(i)]
- (2) The permittee shall recalculate the NMOC mass emission rate using Equation 1 or Equation 2 provided in 40 CFR 60.674 and using the average site-specific NMOC concentration from the collected samples instead of the default value provided in 40 CFR 60.674. [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 40 CFR 60.767(b)(1), and shall recalculate the NMOC mass emission rate annually as required under 40 CFR 60.762(b). The site-specific NMOC concentration must be retested every 5 years using the methods specified in 40 CFR 60.764. [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 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 either Equation 1 or Equation 2 in 40 CFR 60.764 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 40 CFR 60.764. 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 must recalculate the NMOC mass emission rate annually using Equation 1 or Equation 2 provided in 40 CFR 60.764 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 must 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 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 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. [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 must 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 must 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 must surround the surface emissions monitor (SEM), and must be placed on the ground, to ensure wind turbulence is blocked. SEM cannot be conducted if average wind speed exceeds 25 miles per hour. [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 must 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) The permittee seeking to comply with the Tier 4 provisions in paragraph (f) of this Monitoring section must 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 40 CFR 60.767(c)(4)(iii). [40 CFR 60.764(a)(6)(iv)].
 - (v) If there is any measured concentration of methane of 500 parts per million (ppm) 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 ppm or greater from the surface of the landfill according to 40 CFR 62.16714(b) and (c) 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.

- (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 ppm or greater from the surface of the landfill, the permittee shall continue quarterly surface emission monitoring using the methods specified in 40 CFR 60.674.

II.B.1.b.2

Recordkeeping:

- (a) The permittee shall maintain records required under 40 CFR Part 60.768, as they apply.
- (b) **Site-specific surface methane emissions demonstration.** The 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 specified in 40 CFR 60.764(a)(6) 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 the 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 must be time and date-stamped and taken at the first sampling location prior to sampling and at the last sampling location after sampling at the end of each sampling day, for the duration of the Tier 4 monitoring demonstration.
 - (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 must determine the coordinates using an instrument with an accuracy of at least 4 meters. Coordinates must be in decimal degrees with at least five decimal places.
 - (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) **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)]
- (d) **Leachate or liquids addition.** The permittee reporting leachate or other liquids addition under paragraph (c) of Reporting 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)]

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

II.B.1.b.3

Reporting:

- (a) **NMOC emission rate report.** The permittee shall submit an NMOC emission rate report following the procedure specified in 40 CFR 60.767(i)(2) to the Director initially and annually thereafter, except as provided for in 40 CFR 60.767(b)(1)(ii). 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 must contain an annual or 5-year estimate of the NMOC emission rate calculated using the formula and procedures provided in 40 CFR 60.764(a) or (b), as applicable. [40 CFR 60.767(b)(1)]
 - (i) 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 40 CFR 60.767(i)(2), an estimate of the NMOC emission rate for the next 5-year period in lieu of the annual report. This estimate must 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 must be provided to the Director. This estimate must 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 must be submitted to the Director. The revised estimate must 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 must 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) The permittee subject to the requirements of this condition 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) Electronic reporting. The permittee shall submit reports electronically according to 40 CFR 60.767(i)(1) and (2).
- (c) **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 must submit to the Director, annually, following the procedure specified in 40 CFR 60.767(i)(2), 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 must contain items in paragraph (c)(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 must 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 must contain items in paragraph (c)(1) through (6) above for the 365-day period following the 365-day period included in the previous annual report, and the report must 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 (c)(1) through (7) above once they have submitted the closure report in 40 CFR 60.767(e). [40 CFR 60.767(k)]

(d) **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 40 CFR 60.674(a)(6). The landfill must also include a description of the wind barrier to be used during the SEM in the notification. Notification must be postmarked not less than 30 days prior to such date.
- (2) If there is a delay to the scheduled Tier 4 SEM date due to weather conditions, including not meeting the wind requirements in 40 CFR 60.764(a)(6)(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 60.767(l)]

- (e) There are no additional 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.

SECTION III: PERMIT SHIELD

A permit shield was not granted for any specific requirements.

REVIEWER COMMENTS

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

1. Comment on an item originating in 40 CFR 60 Subpart XXX regarding Permitted Source NSPS XXX: This landfill was constructed after July 17, 2017 with a design capacity over 2.5 million megagrams and 2.5 million cubic meters [Last updated July 7, 2024]
2. Comment on an item originating in 40 CFR Subpart AAAA regarding Municipal Solid Waste Landfill
Applicability of 40 CFR 63 Subpart AAAA: The North Valley Landfill is not subject to the requirements of 40 CFR 63 Subpart AAAA because it is not a major source, is not collocated with a major source, and does not have uncontrolled emission equal to or greater than 50 megagrams per year NMOC. The landfill does not have a bioreactor. [Last updated July 7, 2024]
3. 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. [Last updated July 7, 2024]
4. Comment on an item originating in Permitted Source regarding Municipal Solid Waste Landfill Opacity Limit: This operating permit only contains requirements applicable to the landfill itself. During the 2024 renewal process, the permittee confirmed that fugitive dust is the only potential source of visible emission within the landfill itself. Fugitive dust visible emissions are addressed in II.B.1.a of this operating permit, therefore, the source-wide 20 percent opacity limit has been removed. [Last updated July 7, 2024]
5. Comment on an item originating in 40 CFR 60 Subpart XXX regarding MSW Landfill Logan North Valley Landfill is not a closed landfill as defined in 40 CFR 60.761. Should the landfill be closed, the permittee shall comply with all applicable requirements for closed landfills in 40 CFR 60 Subpart XXX. [Last updated July 7, 2024]
6. Comment on an item originating in 40 CFR 60 Subpart XXX regarding MSW Landfill Logan North Valley Landfill has previously submitted a NMOC emission rate report that showed a NMOC emission rate below 34 megagrams per year, and is estimated to remain under 34 megagrams per year for the next five years. Therefore, the exemption from annual testing described in 40 CFR 60.767(b)(1)(ii) is applicable. [Last updated July 7, 2024]