



Forsyth County

Office of Environmental Assistance and Protection

Minor Barnette, Director

March 22, 2019

Janice D. McHargue, P.E.
City of Winston-Salem Public Works Office
P.O. Box 2511
Winston-Salem, NC 27102-2511

RE: PERMIT TO CONSTRUCT / OPERATE 00913-TV-6

Dear Ms. McHargue

The enclosed permit to construct/operate entitles you to operate your facility in accordance with the permit conditions. This facility must, at all times, meet the requirements of Chapter 3, "Air Quality Control", of the Forsyth County Code.

Please review the permit in detail and contact me if you require clarification or wish to discuss the conditions. Any formal appeal of this permit must be made within 30 days and in accordance with the requirements specified in Sec. 3A-0205 of the Forsyth County Air Quality Control Ordinance. Requests for corrections or administrative changes may be made at any time by contacting me directly. Please note that this document is an official copy of the Air Quality permit providing Office approval as of the effective date. No other copies or drafts of this permit can be relied upon to provide any Office approval or other rights.

If you wish to renew this permit, you must submit the application for renewal such that it is received by the Office at least 9 months before expiration of the permit. Annual permit fees are assessed by separate invoice, in accordance with Sec. 3Q-0200 of the Forsyth County Air Quality Technical Code.

If you have any questions or concerns, please feel free to contact me at (336) 703-2435.

Sincerely,

Paul C. Martin
Senior Environmental Specialist
martinpc@forsyth.cc

Enclosure

c. Peter Lloyd, OEAP



County of Forsyth



FORSYTH COUNTY OFFICE OF ENVIRONMENTAL ASSISTANCE AND PROTECTION

FORSYTH COUNTY GOVERNMENT CENTER
201 NORTH CHESTNUT STREET
WINSTON-SALEM, NC 27101-4120

PERMIT TO CONSTRUCT/OPERATE
AIR QUALITY CONTROL
CLASS: Title V

PERMIT NUMBER	EFFECTIVE DATE	EXPIRATION DATE	RENEWAL DUE
00913-TV-6	March 22, 2019	December 2, 2023	March 2, 2023

Facility Name: Hanes Mill Road Sanitary Waste Landfill
Mailing Address: City of Winston-Salem, Public Works
P.O. Box 2511
City, State, ZIP Code: Winston-Salem, NC 27102-2511

Facility Location: b/t Hanes Mill Road & Ziglar Road, west of U.S. 52
City: Winston-Salem

In accordance with the provisions set forth in the Forsyth County Air Quality Technical Code and Chapter 3 of the Forsyth County Code, "Air Quality Control", the facility identified above is authorized to operate, as outlined in Part I, "Air Quality Title V Operation Permit", and to construct and operate, as outlined in Part II, "Air Quality Construction and Operation Permit", the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations contained within this permit.

The permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete air quality permit application to the Forsyth County Office of Environmental Assistance and Protection and received an Air Quality Permit, except as provided in this permit or in accordance with applicable provisions of the Forsyth County Air Quality Technical Code.

This permit supersedes all previous permits issued to the permittee by the Forsyth County Office of Environmental Assistance And Protection.

Peter B. Lloyd, Ph.D., P.E., Manager
Compliance Assistance & Permitting Division

DATE:

3/21/2019

Hanes Mill Road Sanitary Waste Landfill Air Quality Permit #00913-TV-6 March 22, 2019

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SECTION 1 - PERMITTED EQUIPMENT AND ASSOCIATED AIR POLLUTION CONTROL DEVICE(S)

Emission Source ID#	Emission Source Description	Control Device ID#	Control Device Description
ES-1	Municipal Solid Waste Landfill	CD-01	Landfill gas collection system and Treatment System for Subsequent Sale, or,
		CD-02	Landfill Gas Specialties CF-103018 utility flare with AeroVent blower

SECTION 2 - FACILITY GENERAL ADMINISTRATIVE CONDITIONS

2.1 General Provisions [Sections 3-0100, 3-0200 & Sec. 3Q-0508(i)(16)]

- A) Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in Subchapters 3D and 3Q of the Forsyth County Air Quality Technical Code (FCAQTC).
- B) The terms, conditions, requirements, limitations and restrictions set forth in this permit are binding and enforceable pursuant to Sections 3-0100, 3-0200 of the Forsyth County Air Quality Ordinance (FCAQO), including assessment of civil and/or criminal penalties. This permit is valid only for the specific processes and operations applied for and indicated in the air quality permit application. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and enforcement action by this Office.
- C) This permit is not a waiver of or approval of any other permits that may be required for other aspects of the facility which are not addressed in this permit.
- D) This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore. This permit does not allow the permittee to cause pollution in contravention of local laws or rules, unless specifically authorized by an order from the Director, or to cause pollution in contravention of state laws or rules.
- E) Terms and conditions contained herein shall be enforceable by this Office, the U.S. EPA and citizens of the United States as defined in the federal Clean Air Act, except those identified as **Locally Enforceable Only** requirements which are enforceable by this Office.
- F) Any stationary installation which will reasonably be expected to be a source of pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by this Office, unless the source is exempted by rule. This Office may issue a permit only after it receives reasonable assurance that the installation will not cause pollution in violation of any of the applicable requirements.
- G) In addition to the authority found in Secs. 3D-0501 and 3Q-0508(i)(16), any deviation from the monitoring provisions of this permit may result in a request by this Office to submit data on rates of emissions in order to demonstrate compliance with any applicable regulation.

2.2 Permit Availability [Secs. 3Q-0507(k), 3Q-0508(i)(16), 3Q-0508(i)(9) and 3Q-0110]

The permittee shall have available at the facility a copy of this permit and shall retain, for the duration of the permit term, one (1) complete copy of the application and any information

submitted in support of the application package. The permit and application shall be made available to an authorized representative of this Office, or the U.S. EPA upon request.

2.3 Submissions [Sections 3Q-0507(c), 3Q-0508(i)(16) and 3Q-0104]

All documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required to be sent to this Office by this permit shall be submitted to:

Forsyth County Office of Environmental Assistance and Protection
Forsyth County Government Center, 5th Floor
201 North Chestnut Street
Winston-Salem, NC 27101-4120.

2.4 Severability Clause [Sec. 3Q-0508(i)(2)]

The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any specific circumstance, is challenged, the application of the provision in question to other circumstances, as well as the remainder of this permit's provisions, shall not be affected.

2.5 Duty to Comply [Sec. 3Q-0508(i)(3)]

The permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

2.6 Need to Halt or Reduce Activity Not a Defense [Sec. 3Q-0508(i)(4)]

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.

2.7 Permit Shield [Sec. 3Q-0512(a)]

- A) Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
- B) A permit shield shall not alter or affect:
 - 1) the power of the Forsyth County Board of Commissioners, Director, or Governor under NCGS 143-215.3(a)(12) or the U.S. EPA under Sec. 303 of the federal Clean Air Act;
 - 2) the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
 - 3) the applicable requirements under Title IV of the Clean Air Act; or
 - 4) the ability of the Director or the U.S. EPA under Sec. 114 of the federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
- C) A permit shield shall not apply to any change made at a facility that does not require a permit or to any permit revision made under Sec. 3Q-0523.
- D) A permit shield shall not extend to minor permit modifications made under Sec. 3Q-0515.

2.8 Circumvention [Sections 3D-0502 and 3Q-0508(i)(16)]

No person shall circumvent any permitted air pollution control device, or allow the emissions of regulated air pollutants without the applicable air pollution control device operating properly. Unless otherwise specified by this permit, no permitted emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

2.9 Good Air Pollution Control Practice [Sections 3D-0502 and 3Q-0508(i)(16)]

At all times, the equipment listed in **Section 1** shall be operated and maintained in a manner consistent with the design and emissions control as applied for in the application.

2.10 Reporting Requirements for Excess Emissions and Permit Deviations [Secs. 3D-0535(f), 3Q-0508(f)(2), 3Q-0508(i)(16), & 3Q-0508(g)]

“Excess Emissions” - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections 3D-0500, 3D-0900, 3D-1200, or 3D-1400; or by a permit condition; or that exceeds a **Locally Enforceable Only** emission limit established in a permit issued under Section 3Q-0700. (*Note: This definition applies where the NSPS does not further define excess emissions for an affected NSPS emissions source.*)

“Deviation” - means any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions.

A) Sources subject to Sections 3D-0524, 3D-1110 or 3D-1111 -Excess Emissions and Permit Deviations:

- 1) If the source specific NSPS (3D-0524) or NESHAP (3D -1110 or 3D-1111) defines “excess emissions”, these shall be reported as prescribed in 3D-0524, 3D-1110 or 3D-1111.
- 2) If the source specific NSPS (3D-0524) or NESHAP (3D-1110 or 3D-1111) *does not* define “excess emissions”, the permittee shall report excess emissions as deviations from permit requirements as prescribed in paragraph 3, below.
- 3) In addition to any specific NSPS or NESHAP reporting requirements the permittee shall upon becoming aware:
 - a) report to this Office any deviations from permit requirements by the next business day, unless an alternative reporting schedule is specifically provided in the permit, and
 - b) report in writing to this Office all deviations from permit requirements or any excess emissions within two business days, unless an alternative reporting schedule is specifically provided in the permit. The written report shall include the probable cause of such deviations and any corrective actions or preventative actions taken. Reports of all deviations from permit requirements shall be certified by a responsible official.

B) Sources not subject to Sections 3D-0524, 3D-1110, or 3D-1111

- 1) Excess Emissions Greater than Four (4) Hours in Duration [3D-0535(f)]
The permittee shall report excess emissions greater than four hours in duration as prescribed in Sec. 3D-0535(f) including, but not limited to the following:

- a) Notify this Office of any such occurrence by 9:00 a.m. Eastern Standard Time (EST) of this Office's next business day of becoming aware of the occurrence as described in Sec. 3D-0535(f)(1);
 - a) Notify this Office immediately when corrective measures have been accomplished; and
 - c) Submit, if requested, to this Office, within 15 days after the request, a written report as described in Sec. 3D-0535(f)(3).
- 2) Excess Emissions Less than Four (4) Hours in Duration and Deviations [3Q-0508(f)]
The permittee shall report excess emissions less than four (4) hours in duration and deviations from permit requirements as follows:
- a) Report to this Office any excess emissions less than four (4) hours in duration, and any deviations from permit requirements quarterly, unless an alternative reporting schedule is specifically provided in the permit; and
 - b) Report in writing to this Office any excess emission less than four (4) hours in duration, or any deviations from permit requirements quarterly, unless an alternative reporting schedule is specifically provided in the permit. The written report shall include the probable cause of such excess emissions and deviations, and any corrective actions or preventative actions taken. All reports of excess emissions and deviations from permit requirements shall be certified by a responsible official.
- C) The permittee shall comply with all other requirements contained in Sec. 3D-0535 (Sec. 3D-0535(g) is **Locally Enforceable Only**.)

2.11 Emergency Provisions <40 CFR 70.6(g)>

The permittee shall be subject to the following provision with regard to emergencies:

- A) An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall *not* include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
- B) An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in paragraph C below are met.
- C) The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs, or other relevant evidence that include information as follows:
 - 1) an emergency occurred and that the permittee can identify the cause(s) of the emergency;
 - 2) the permitted facility was at the time being properly operated;
 - 3) during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the standards, or other requirements in the permit; and
 - 4) the permittee submitted notice of the emergency to this Office within two working days of the time when emission limitations were exceeded due to the emergency. This notice

must contain a description of the emergency, and steps taken to mitigate emissions, and corrective actions taken.

- D) In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- E) This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

2.12 Permit Fees [Sections 3Q-0206(b), 3Q-0508(i)(10), & 3Q-0519(a)(4)]

If, within 30 days after being billed, the permittee fails to pay an annual permit fee required under Subchapter 3Q-0200 of the FCAQTC, the Director may initiate action to terminate this permit under Sec. 3Q-0519 of the FCAQTC.

2.13 Annual Emission Inventory Requirements [Sec. 3Q-0207]

The permittee shall report to the Director by June 30th of each year the actual emissions of each air pollutant listed in Sec. 3Q-0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form(s) as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

2.14 Compliance Certification <40 CFR 70.6(c)> [Sections 3Q-0508(n) & 3Q-0508(i)(16)]

By March 1st unless another date is established by the Director, the permittee shall submit to this Office and the U.S. EPA (**U.S. EPA Region 4, Air Enforcement Section, Mail Code: 4APT-AEEB, 61 Forsyth Street, S.W., Atlanta, GA 30303**) a compliance certification by a responsible official with all terms and conditions in the permit, including emissions limitations, standards, or work practices. The compliance certification shall comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the federal Clean Air Act. The compliance certification shall include all of the following (provided that the identification of applicable information may cross-reference the permit or previous reports as applicable):

- A) the identification of each term or condition of the permit that is the basis of the certification;
- B) the status of compliance with the terms and conditions of the permit for the period covered by the certification, based on the methods or means designated in 40 CFR 70.6(c)(5)(iii)(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 64 occurred;
- C) whether compliance was continuous or intermittent;
- D) the identification of the method(s) or other means used by the owner and operator for determining the compliance status with each term and condition during the certification period; these methods shall include the methods and means required under 40 CFR Part 70.6(a)(3); and
- E) such other facts as the Director may require to determine the compliance status of the source.

2.15 Retention of Records [Sec. 3Q-0508(f)]

The permittee shall retain records of all required monitoring data and supporting information for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or

application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit.

2.16 NESHAP - Recordkeeping Requirement for Applicability Determinations <40 CFR 63.10(b)(3)> [Sec. 3D-1111]

If the permittee determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants is not subject to a relevant standard or other requirement established under 40 CFR Part 63, the permittee shall keep a record of the applicability determination on site at the source for a period of five (5) years after the determination, or until the source changes its operations to become an affected source. This record shall include all of the information required under 40 CFR 63.10(b)(3).

2.17 Duty to Provide Information [Sec. 3Q-0508(i)(9)]

- A) The permittee shall furnish to this Office, in a timely manner, any reasonable information that the Director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
- B) The permittee shall furnish to this Office copies of records required to be kept by the permit when such copies are requested by the Director.

2.18 Duty to Supplement or Correct Application [Sec. 3Q-0507(f)]

The permittee, upon becoming aware that any relevant facts were omitted from the application or that incorrect information was submitted with the application, shall promptly submit such supplementary facts or corrected information to this Office. The permittee shall also provide additional information necessary to address any requirements that become applicable to the source after the date a complete application was submitted but prior to release of the draft permit.

2.19 Certification by Responsible Official [Sec. 3Q-0520]

A responsible official (as defined in 40 CFR 70.2) shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statement and information in the document are true, accurate, and complete.

2.20 Inspection and Entry [Sec. 3Q-0508(l)]

- A) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized representatives of this Office to perform the following:
 - 1) enter upon the permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
 - 2) have access to and copy, at reasonable times, any records that must be kept under conditions of the permit;
 - 3) inspect, at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
 - 4) sample or monitor substances or parameters, at reasonable times and using reasonable

safety practices, for the purpose of assuring compliance with the permit or applicable requirements.

Nothing in this condition shall limit the ability of the U.S. EPA to inspect or enter the premises of the permittee under Section 114 or other provisions of the Clean Air Act.

- B) No person shall obstruct, hamper or interfere with any such authorized representative while in the process of carrying out his official duties.

2.21 Averaging Times <40 CFR 70.6(a)(3)> [Sec. 3Q-0508(f)]

Unless otherwise specified in *Section 3* of this permit for a specific emission standard or limitation, the applicable averaging period for determining compliance with an emission standard or limitation during compliance testing shall be based on the applicable U.S. EPA reference test method.

2.22 Compliance Testing [Sec. 3D-2602(e)]

When requested by this Office for determining compliance with emission control standards, the permittee shall provide sampling ports, pipes, lines, or appurtenances for the collection of samples and data required by the test procedure; scaffolding and safe access to the sample and data collection locations; and light, electricity, and other utilities required for sample and data collection.

2.23 General Emissions Testing and Reporting Requirements [Sec. 3D-2602 and Sec. 3Q-0508(i)(16)]

Testing shall be conducted in accordance with FCAQTC Section 3D-2600, except as may be otherwise required in FCAQTC Sections 3D-0524, 3D-0912, 3D-1110, 3D-1111, and 3D-1415, or a permit condition specific to the emissions source. Requests to use an alternative test method or procedure must be made in writing at least 45 days prior to the test and be approved by this Office. Alternatives to test methods or procedures specified for emissions sources subject to test requirements under 40 CFR 60, 40 CFR 61, or 40 CFR 63 may require approval by the U.S. EPA. When required to conduct emissions testing under the terms of the permit:

- A) The permittee shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved prior to air pollution testing. Emission testing protocols must be submitted at least 45 days before conducting the test for pre-approval prior to testing if requested by the permittee.
- B) The permittee shall notify this Office of the specific test dates at least 15 days prior to the scheduled test date in order to afford this Office the opportunity to have an observer on-site during the sampling program.
- C) During all sampling periods, the permittee shall operate the emission source(s) under operating conditions that best fulfill the purpose of the test and are approved by the Director or his delegate.
- D) The permittee shall submit one copy of the test report to this Office not later than 30 days after sample collection. The permittee may request an extension to submit the final test report if the extension request is a result of actions beyond the control of the permittee. The test report shall contain at a minimum the following information:

- 1) a certification of the test results by sampling team leader and facility representative;
- 2) a summary of emissions results expressed in the same units as the emission limits given in the rule(s) for which compliance is being determined and text detailing the objectives of the testing program, the applicable state and federal regulations, and conclusions about the testing and compliance status of the emission source(s) as appropriate;
- 3) a detailed description of the tested emission source(s) and sampling location(s) process flow diagrams, engineering drawings, and sampling location schematics as necessary;
- 4) all field, analytical and calibration data necessary to verify that the testing was performed as specified in the applicable test methods;
- 5) example calculations for at least one test run using equations in the applicable test methods and all test results including intermediate parameter calculations; and
- 6) documentation of facility operating conditions during all testing periods and an explanation relating these operating conditions to maximum normal operation. If necessary, provide historical process data to verify maximum normal operation.

E) This Office will review emission test results with respect to the specified testing objectives as proposed by the permittee and approved by this Office.

2.24 Termination, Modification, and Revocation of the Permit [Sec. 3Q-0519]

The Director may terminate, modify, or revoke and reissue this permit if:

- A) the information contained in the application or presented in support thereof is determined to be incorrect;
- B) the conditions under which the permit or permit renewal was granted have changed;
- C) violations of conditions contained in the permit have occurred;
- D) the permit holder fails to pay fees required under Section 3Q-0200 within 30 days after being billed;
- E) the permittee refuses to allow the Director or his authorized representative upon presentation of credentials:
 - 1) to enter, at reasonable times and using reasonable safety practices, the permittee's premises in which a source of emissions is located or in which any records are required to be kept under terms and conditions of the permit;
 - 2) to have access, at reasonable times, to any copy or records required to be kept under terms and conditions of the permit;
 - 3) to inspect, at reasonable times and using reasonable safety practices, any source of emissions, control equipment, and any monitoring equipment or method required in the permit; or
 - 4) to sample, at reasonable times and using reasonable safety practices, any emission sources at the facility;
- F) the U.S. EPA requests that the permit be revoked under 40 CFR 70.7(g) or §70.8(d); or
- G) the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of Chapter 3 of the Forsyth County Code.

2.25 Permit Re-openings, Modifications, Revocations and Re-issuances, or Terminations [Sec. 3Q-0508(i)(5)]

The Director may reopen, modify, revoke and reissue, or terminate this permit for reasons specified in Sections 3Q-0517 or 3Q-0519. The filing of a request by the permittee for a permit

revision, revocation and reissuance, or termination, notification of planned changes, or anticipated noncompliance does not stay any permit condition in this permit.

2.26 Permit Renewal [Sec. 3Q-0508(e) and Sec. 3Q-0513]

This permit is issued for a term not to exceed five (5) years. Permits issued under Title IV of the Clean Air Act shall be issued for a fixed period of five (5) years. This permit shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete renewal application is submitted at least nine months before the date of permit expiration. If the permittee or applicant has complied with Sec. 3Q-0512(b)(1), this permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of this permit shall remain in effect until the renewal permit has been issued or denied.

2.27 Reopening for Cause [Sections 3Q-0517 and 3Q-0508(g)]

This permit shall be reopened and revised in accordance with Sec. 3Q-0517 prior to its expiration date, for any of the following reasons:

- A) Additional applicable requirements become applicable to the facility with remaining permit term of three (3) or more years.
- B) Additional requirements, including excess emissions requirements, become applicable to this source under Title IV of the Clean Air Act. Excess emissions offset plans for this source shall become part of this permit upon approval by the U.S. EPA.
- C) The Director or the U.S. EPA finds that a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.
- D) The Director or the U.S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

2.28 Construction and Operation Permits [Sections 3Q-0100 and 3Q-0300]

A construction and operating permit shall be obtained by the permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of Sections 3Q-0100 and 3Q-0300.

2.29 Permit Modifications [Sections 3Q-0514, 3Q-0515, 3Q-0516, 3Q-0517, 3Q-0523, & 3Q-0524]

- A) Permit modifications may be subject to the requirements of Sections 3Q-0514, 3Q-0515, 3Q-0516, and 3Q-0524.
- B) Changes made pursuant to Secs. 3Q-0523(a) and (b) do not require a permit modification.
- C) The permittee shall submit an application for reopening for cause in accordance with Sec. 3Q-0517 if notified by this Office.
- D) To the extent that emissions trading is allowed under FCAQTC Subchapter 3D, including subsequently adopted maximum achievable control technology (MACT) standards, emissions trading shall be allowed without permit revision pursuant to Sec. 3Q-0523(c).

2.30 Insignificant Activities [Sections 3Q-0503 and 3Q-0508(i)(15)]

Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the

source is exempted from demonstrating compliance with any applicable requirement. The permittee shall have available at the facility at all times and made available to an authorized representative of this Office upon request, documentation, including calculations if necessary, to demonstrate that an emission source or activity is insignificant.

2.31 Standard Application Form and Required Information [Sections 3Q-0505 and .0507]

The permittee shall submit applications and required information in accordance with the provision of Sections 3Q-0505 and 3Q-0507.

2.32 Property Rights [Sec. 3Q-0508(i)(8)]

This permit does not convey any property rights of any sort, or any exclusive privileges.

2.33 Refrigerant Requirements (Stratospheric Ozone and Climate Protection) [Sec. 3Q-0508(b)]

- A) If the permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR 82 Subpart A, Appendices A and B, the permittee shall service, repair, and maintain such equipment according to the work practices and personnel certification requirements, and the permittee shall use certified recycling and recovery equipment specified in 40 CFR 82 Subpart F.
- B) The permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR 82 Subpart F.
- C) The permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the U.S. EPA or its designee as required.

2.34 Prevention of Accidental Releases - Section 112(r) [Sec. 3Q-0508(h)]

If the permittee is required to develop and register a risk management plan pursuant to Section 112(r) of the federal Clean Air Act, then the permittee is required to register this plan in accordance with 40 CFR Part 68.

2.35 Title IV Allowances [Sec. 3Q-0508(i)(1)]

The facility's emissions are prohibited from exceeding any allowances that the facility lawfully holds under Title IV of the Clean Air Act. This permit shall not limit the number of allowances held by the permittee, but the permittee may not use allowances as a defense to noncompliance with any other applicable requirement.

2.36 Air Pollution Alert, Warning or Emergency [Section 3D-0300]

Should the Director of this Office declare an Air Pollution Alert, Warning or Emergency, the permittee will be required to operate in accordance with the permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in Section 3D-0300.

2.37 Registration of Air Pollution Sources [Sec. 3D-0202]

The Director of this Office may require the permittee to register a source of air pollution. If the

permittee is required to register a source of air pollution, this registration and required information shall be in accordance with Sec. 3D-0202(b).

2.38 Ambient Air Quality Standards [Sec. 3D-0501(e)]

In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in Sec. 3D-0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

2.39 Odors [Sec. 3D-0522] - *Locally Enforceable Only*

The permittee shall not cause or permit the emission of odors beyond the facility's property lines which are harmful, irritating or which unreasonably interfere with the use and enjoyment of any person's properties or living conditions, or any public properties or facilities. Such odors are prohibited by Sec. 3D-0522. No violation shall be cited, provided that the best practical treatment, maintenance, and control of odor(s) currently available is used. This requirement does not apply to normal agricultural practices, or to accidental emissions of odors which are not normally produced during routine operations and activities as determined by the Director.

2.40 Fugitive Dust Control Requirement [Sec. 3D-0540]

The permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six (6) minutes in any one (1) hour (using Reference Method 22 in 40 CFR 60, Appendix A), the owner or operator may be required to submit and implement a fugitive dust control plan as described in 3D-0540(f).

New Source Performance Standards (NSPS) General Conditions - [Sec. 3D-0524]

Following are conditions found in the 40 CFR Part 60 NSPS General Provisions. The following conditions only apply to sources subject to a relevant standard of a subpart of 40 CFR Part 60, except when otherwise specified in a particular subpart or in a relevant standard.

2.41 NSPS - General Provisions <40 CFR 60 Subpart A> [Sec. 3D-0524]

The permittee shall comply with all applicable requirements specified in the general provisions of the New Source Performance Standards (40 CFR 60 Subpart A), including, but not limited to requirements concerning notifications, testing, monitoring, recordkeeping, modifications and reconstruction.

2.42 NSPS - Good Air Pollution Control Practice <40 CFR 60.11(d)> [Sec. 3D-0524]

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution

control equipment in a manner consistent with good air pollution control practice for minimizing emissions.

2.43 NSPS - Circumvention <40 CFR 60.12> [Sec. 3D -0524]

Permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard under 40 CFR 60. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

2.44 NSPS - Maintain Records, Startup/Shutdown/Malfunction <40 CFR 60.7(b)> [Sec. 3D-0524]

The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

2.45 NSPS - Files Available for Inspection <40 CFR 60.7(f)> [Sec. 3D-0524]

The permittee shall maintain a file of all measurements, including, if applicable, performance test measurements and all other information required in 40 CFR.60. This file shall be kept in a permanent form suitable for inspection and shall be retained at least two (2) years following the date of such measurements, maintenance, reports, and records.

2.46 NSPS - Performance Testing Facilities Provided by Permittee <40 CFR 60.8(e)> [Sec. 3D-0524]

- A) For any performance testing, the permittee shall provide, or cause to be provided, performance testing facilities as follows:
- 1) Sampling ports adequate for the applicable test methods. This includes:
 - a) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures, and;
 - b) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.
 - 2) Safe sampling platform(s) with safe access.
 - 3) Utilities for sampling and testing equipment.
- B) Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For purposes of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply.

National Emission Standards for Hazardous Air Pollutants for Source Categories (NESHAP)
General Conditions - [Sec. 3D-1111]

Following are conditions found in the 40 CFR Part 63 NESHAP General Provisions. The following conditions only apply to sources subject to a relevant standard of a subpart of 40 CFR Part 63 except when otherwise specified in a particular subpart or in a relevant standard.

2.47 NESHAP - General Provisions <40 CFR 63 Subpart A> [Sec. 3D-1111]

The permittee shall comply with all applicable requirements specified in the general provisions of the National Emission Standards for Hazardous Air Pollutants for Source Categories (40 CFR 63 Subpart A) including but not limited to requirements concerning notifications, testing, monitoring, recordkeeping, modifications, construction, and reconstruction.

2.48 NESHAP - Startup Shutdown and Malfunction Plan <40 CFR 63.6(e)(3)> [Sec. 3D-1111]

The permittee shall develop and implement a written startup, shutdown and malfunction plan in accordance with the requirements in 40 CFR 63.6(e)(3).

2.49 NESHAP - Good Air Pollution Control Practice <40 CFR 63.6(e) and 63.8(c)> [Sec. 3D-1111]

- A) At all times, including periods of startup, shutdown, and malfunction, the permittee shall maintain and operate any affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions at least to the levels required by all relevant standards.
- B) The permittee also shall maintain and operate each continuous monitoring system (CMS) as specified in 40 CFR 63.8, or in a relevant standard, and in a manner consistent with good air pollution control practices.
- C) Malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the startup, shutdown, and malfunction plan required by 40 CFR 63.6(e)(3).
- D) Operation and maintenance requirements established pursuant to Section 112 of the Clean Air Act are enforceable independent of emissions limitations or other requirements in relevant standards.

2.50 NESHAP - Circumvention <40 CFR 63.4(b)> [Sec. 3D-1111]

The permittee shall not build, erect, install, or use any article, machine, equipment or process to conceal an emission that would otherwise constitute noncompliance with a relevant standard. Such concealment includes, but is not limited to:

- A) the use of gaseous diluents to achieve compliance with a relevant standard based on the concentration of a pollutant in the effluent discharged to the atmosphere;
- B) the use of diluents to achieve compliance with a relevant standard for visible emissions, and;
- C) the fragmentation of an operation such that the operation avoids regulation by a relevant standard.

2.51 NESHAP - Maintain Records <40 CFR 63.10(b)(2)> [Sec. 3D-1111]

For affected sources, the permittee shall maintain relevant records of:

- A) the occurrence and duration of each startup, shutdown, or malfunction of operation;
- B) the occurrence and duration of each malfunction of the air pollution control equipment;
- C) all maintenance performed on the air pollution control equipment;
- D) actions taken during periods of startup, shutdown, and malfunction and all information necessary to demonstrate compliance with the affected source's startup, shutdown, and malfunction plan when all actions taken are consistent with the procedures specified in the plan;
- E) each period during which a CMS is malfunctioning or inoperative;
- F) all required measurement needed to demonstrate compliance with a relevant standard;
- G) all results of performance tests, CMS performance evaluations, and opacity and visible emission observations;
- H) all measurements as may be necessary to determine the conditions of performance tests and performance evaluations;
- I) all CMS calibration checks;
- J) all adjustments and maintenance performed on CMS;
- K) any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements if the source has been granted a waiver under 40 CFR 63.10(f);
- L) all emission levels relative to the criterion for obtaining permission to use an alternative to the relative accuracy test if the source has been granted such permission under 40 CFR 63.8(f)(6); and
- M) all documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9.

2.52 NESHAP - Files Available for Inspection <40 CFR 63.10(b)(1)> [Sec. 3D-1111]

- A) The permittee shall maintain files of all information required by 40 CFR Part 63 recorded in a form suitable and readily available for expeditious inspection and review.
- B) The files shall be retained for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- C) At a minimum, the most recent two years of data shall be retained on site; the remaining three years of data may be retained off site.

2.53 NESHAP - Performance Testing Facilities Provided by Permittee <40 CFR 63.7(d)> [Sec. 3D-1111]

- A) For any performance testing for each new source and, at the request of the Director, for each existing source, the permittee shall provide performance testing facilities as follows:
 - 1) Sampling ports adequate for test methods applicable to the affected source. This includes:
 - a) Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures; and
 - b) Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.
 - 2) Safe sampling platform(s).

- 3) Safe access to sampling platform(s).
- 4) Utilities for sampling and testing equipment.
- 5) Any other facilities that the Director deems necessary for safe and adequate testing of a source.

B) Unless otherwise specified in the applicable subpart, each performance test shall be conducted according to the requirements in 40 CFR 63.7.

**SECTION 3
SPECIFIC LIMITATIONS AND CONDITIONS**

The emission source(s) and associated air pollution control device(s) listed in **Section 1** are subject to the following specific terms, conditions, and limitations:

3.1 MUNICIPAL SOLID WASTE LANDFILL (ES-1), CONTROLLED BY GAS COLLECTION SYSTEM AND TREATMENT SYSTEM FOR SUBSEQUENT SALE (CD-1)

Table 3.1, Summary of the limits and/or standards for emission source(s) in Section 1

Regulated Pollutant	Applicable Standard	Applicable Regulation
Non-methane Organic Compounds (NMOC)	Install and operate an approved LFG collection system; control by routing collected LFG to: a) Utility flare, designed & operated in accordance with 40 CFR 60.18, or b) LFG treatment system, for subsequent use or sale.	FCAQTC Sec. 3D-0524, New Source Performance Standards (NSPS) & 40 CFR Part 60, Subpart WWW, NSPS for Municipal Solid Waste Landfills
Hazardous Air Pollutants (HAP)	Comply with NSPS; additional reporting requirements, SSM requirements	FCAQTC Sec. 3D-1110 & 40 CFR Part 63, Subpart AAAA, <i>National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills</i> (40 CFR 63.1930 <i>et seq.</i>)

A) 40 CFR 60, Subpart WWW: Standards of Performance for New Stationary Sources: Municipal Solid Waste Landfills (Sec. 3D-0524)

1) Applicable Regulatory Requirements

The permittee shall comply with all applicable standards and provisions, including the notification, testing, work practices, monitoring, recordkeeping, and reporting requirements of Sec. 3D-0524, "New Source Performance Standards" (NSPS), promulgated in 40 CFR Part 60, Subpart WWW, including all applicable requirements and provisions specified by the general provisions of the New Source Performance Standards (40 CFR 60, Subpart A).

- a) The provisions of 40 CFR 60, Subpart WWW apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed five (5) days for collection systems, and shall not exceed one (1) hour for treatment or control devices.
[Sec. 3D-0524, 40 CFR 60.755(e)]
- b) The permittee may propose, for approval by this Office, alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions of Sections 60.753 through §60.758, and of applicable conditions of this permit. However, until any such alternative is approved, and until such time as any required permit modification is made, the permittee shall comply with 40 CFR 60.753 through §60.758, and the applicable permit conditions herein.
[Sec. 3D-0524, 40 CFR 60.752(b)(2)(i)(B) and (C), 40 CFR 63.1955(c)]

2) **Installation and Maintenance of Collection & Control System**

The permittee shall install and maintain a **landfill gas** (hereinafter denoted as LFG) **collection and control system** (hereinafter denoted as CCS), meeting the specifications and requirements of 40 CFR 60.752(b)(2)(ii), that effectively captures the LFG generated within the landfill.

- a) The CCS shall be installed in conformance to the Office-approved "design plan".
- b) Changes or additions to the CCS shall be performed pursuant to an amended design plan prepared and certified by a professional engineer.
- c) The permittee shall submit to this Office any amendments to the design plan.
[Sec. 3D-0524, 40 CFR 60.752(b)(2)(ii)(A)(1) and 60.755(a)(1)]
- d) The active CCS shall be designed to as appropriate to convey the maximum expected LFG flow rate from the entire area of the landfill that warrants control over the intended use period of the CCS and/or treatment system equipment.
[Sec. 3D-0524, 40 CFR 60.752(b)(2)(ii)(A)(1)]
- e) The active CCS shall collect LFG from each area, cell, or group of cells in which the initial solid waste has been placed for a period of five (5) years or more if active, or two (2) years or more if closed or at final grade. The LFG collection devices shall be located at a density sufficient to meet all operational and performance standards.
[Sec. 3D-0524, 40 CFR 60.752(b)(2)(ii)(A)(2), 60.753(a), & 60.755(a)(2)]
- f) The CCS shall collect LFG at a sufficient extraction rate to meet all applicable standards. The permittee shall demonstrate the sufficiency of the extraction rate by following the procedures of 40 CFR 60.755(a)(3) and permit **Condition 3.1(A)(6)(c)**.
[Sec. 3D-0524, 40 CFR 60.752(b)(2)(ii)(A)(3)]
- g) The CCS shall be designed to minimize off-site migration of subsurface gas.
[Sec. 3D-0524, 40 CFR 60.752(b)(2)(ii)(A)(4)]
- h) Pursuant to the NSPS, the permittee shall route the collected LFG to a treatment system that processes the gas for subsequent use or sale, or to a flare designed in accordance with 40 CFR 60.18 and that meets all requirements set forth in permit **Condition 3.2**.
[Sec. 3D-0524, 40 CFR 60.752(b)(2)(iii)]
- i) The CCS shall be operated in accordance with the operational standards, compliance provisions, and monitoring requirements of 40 CFR 60.753, §60.755, and §60.756, and permit conditions **3.1(A)(5)-(7)**.
[Sec. 3D-0524, 40 CFR 60.752(b)(2)(iv)]

3) **Specifications for Active Collection Systems**

- a) Unless alternative procedures have been previously approved by this Office, as provided for in 40 CFR 60.752(b)(2)(i)(C) and (D), the permittee shall site, throughout all LFG producing areas of the landfill, active collection wells, horizontal collectors, surface collectors, or other extraction devices at a sufficient density pursuant to the procedures set forth in 40 CFR 60.759(a)(1) through (3).
[Sec. 3D-0524, 40 CFR 60.759(a)]
- b) The collection devices within the interior and along the perimeter areas of the landfill shall be certified by a professional engineer that they are able to achieve comprehensive control of surface LFG emissions.
[Sec. 3D-0524, 40 CFR 60.759(a)(1)]
- c) The CCS design certified by the professional engineer shall address the following subjects:
 - i) depth(s) of placed refuse,
 - ii) refuse gas generation rates and flow characteristics,
 - iii) cover/cap properties,

- iv) gas collection system expandability,
- v) leachate and condensate management,
- vi) accessibility,
- vii) compatibility with filling operations,
- viii) integration with closure/end-use,
- ix) air intrusion control,
- x) corrosion resistance,
- xi) fill settlement,
- xii) resistance to the decomposition heat of the placed refuse.
[Sec. 3D-0524, 40 CFR 60.759(a)(1)]
- d) The determination of the sufficient density of the collection devices, as required in permit Condition **3.1(A)(3)(a)**, shall address possible LFG migration issues and future augmentation of the CCS through the use of active or passive systems at the landfill perimeter and/or exterior.
[Sec. 3D-0524, 40 CFR 60.759(a)(2)]
- e) The placement of collection devices shall control all LFG producing areas, with the following exceptions:
 - i) Any segregated area of asbestos or non-degradable material may be excluded if documented as provided in Sections 60.759(a)(3)(i) and §60.758(d), and permit condition **3.1(A)(8)(h)**.
 - ii) Any non-productive area of the landfill may be excluded if the permittee, using the procedures provided in Section 60.759(a)(3)(ii), demonstrates to the satisfaction of this Office that the *total of all excluded areas contributes less than 1 percent of the total amount of NMOC emissions* from the balance of the landfill.
[Sec. 3D-0524, 40 CFR 60.759(a)(3)]
- f) The LFG extraction components shall be constructed of polyvinyl chloride (PVC), high density polyethylene (HDPE) pipe, fiberglass, stainless steel, or other nonporous corrosion resistant material of suitable dimensions to convey projected amounts of gases, withstand installation, static, and settlement forces, and withstand planned overburden or traffic loads.
[Sec. 3D-0524, 40 CFR 60.759(b)(1)]
- g) The permittee shall extend the CCS as necessary in order to maintain compliance with all applicable LFG emission and migration standards.
[Sec. 3D-0524, 40 CFR 60.759(b)(1)]
- h) Collection devices such as wells and horizontal collectors shall be perforated to allow LFG entry without head loss sufficient enough to impair performance across the intended extent of control. Perforations shall be situated with regard to the need to prevent excessive air infiltration.
[Sec. 3D-0524, 40 CFR 60.759(b)(1)]
- i) Vertical wells shall be placed so as not to endanger underlying liners, and shall address the occurrence of water within the landfill.
[Sec. 3D-0524, 40 CFR 60.759(b)(2)]
- j) Holes and trenches constructed for piped wells and horizontal collectors shall be of sufficient cross section dimensions so as to allow for their proper construction and completion.
[Sec. 3D-0524, 40 CFR 60.759(b)(2)]
- k) Collection devices shall be designed so as not to allow indirect short circuiting of air into the cover, refuse into the collection system, or LFG into the ambient air.
[Sec. 3D-0524, 40 CFR 60.759(b)(2)]
- l) Any gravel fill used around pipe perforations should be of dimensions that will not penetrate, block, or otherwise disrupt the perforations.

- [Sec. 3D-0524, 40 CFR 60.759(b)(2)]
- m) LFG collection devices may be connected to the collection header pipes either below or above the landfill surface. Each connector assembly shall include:
- i) a positive-closing throttle valve,
 - ii) any necessary seals and couplings,
 - iii) access couplings, and
 - iv) at least one sampling port.
- [Sec. 3D-0524, 40 CFR §60.759(b)(3)]
- n) All collection devices shall be constructed of PVC, HDPE, fiberglass, stainless steel, or other nonporous material of suitable thickness.
- [Sec. 3D-0524, 40 CFR 60.759(b)(3)]
- o) Pursuant to 40 CFR 60.752(b)(2)(iii), the permittee shall convey the LFG to the CCS through the collection header pipe(s). All gas mover equipment shall be sized to handle the maximum LFG generation flow rate expected over the intended use period of the gas moving equipment pursuant to the procedures set forth in 40 CFR 60.759(c)(1) and (2).
- [Sec. 3D-0524, 40 CFR §60.759(c)]

4) Removal of Collection and Control System (CCS)

The permittee may deactivate, cap, or remove the CCS upon compliance with the following provisions of CFR 60.752(b)(2)(v)(A), (B), and (C), and all provisions of permit condition **3.1(A)(9)(b)**:

- a) The landfill shall be considered a "closed landfill", as defined by 40 CFR 60.751. A closure report as required by 40 CFR 60.757(d) shall be submitted to this Office for approval.
- b) The collection and control system shall have been in operation a *minimum of 15 years*.
- c) The NMOC of the LFG produced by the landfill shall be *less than 50 megagrams per year* on three successive test dates. The test dates shall be no less than 90 days, and no more than 180 days apart.
- d) The permittee shall calculate the NMOC emission rate using the methodology and equation provided in 40 CFR 60.754(b).

[Sec. 3D-0524, 40 CFR §60.754(b) and §60.752(b)(2)(v)]

5) Operational standards - [Sec. 3D-0524, 40 CFR 60.753]

- a) The permittee shall operate the CCS pursuant to the requirements set forth in permit **Condition 3.1(B)(3)**.
- [Sec. 3D-0524, 40 CFR 60.753(a)]
- b) The permittee shall operate the CCS with negative pressure at each LFG wellhead, with the following exceptions:
 - i) When positive pressure occurs in efforts to avoid a fire or increased temperature at a well. All such instances shall be recorded and submitted with the next semi-annual reports as required by 40 CFR 60.757(f)(1) and permit **Condition 3.1(A)(9)(a)**.
 - ii) When a geomembrane or synthetic cover is in place; the permittee shall develop acceptable pressure limits in the design plan submitted to this Office for approval.
 - iii) At a decommissioned well, for which a static positive pressure may occur after shutdown to accommodate for declining LFG flow. All design changes accommodating decommissioned wells shall be approved by this Office.
- [Sec. 3D-0524, 40 CFR 60.753(b)]
- c) The permittee shall operate each interior wellhead in the collection system with a landfill gas temperature less than 55 degrees centigrade, and with either a nitrogen level less than 20% or an oxygen level less than 5%.
 - i) The nitrogen level shall be determined using Method 3C, unless an alternative test

- method is established as allowed by 40 CFR 60.752(b)(2)(i).
- ii) The oxygen level shall be determined by an oxygen meter using Method 3A or 3C with the exceptions to the method described in Sec. 60.753(c)(2)(i) through (v), unless an alternative test method is established as allowed by Sec. 60.752(b)(2)(i).
[Sec. 3D-0524, 40 CFR 60.753(c)]
 - iii). The permittee shall operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill. The permittee shall comply with this requirement pursuant to 40 CFR 60.753(d) and as provided in the surface methane monitoring conditions at condition **3.1(A)(7)(c)**.
[Sec. 3D-0524, 40 CFR 60.753(d)]
 - iv) The permittee shall operate the system such that all collected landfill gases are vented to a control system designed and operated in compliance with Sec. 60.752(b)(2)(iii).
[Sec. 3D-0524, 40 CFR 60.753(e)]
 - v) The permittee shall operate the control or treatment system at all times when the collected gas is routed to the system.
[Sec. 3D-0524, 40 CFR §60.753(f)]
 - vi) If for any reason the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the landfill gas to the atmosphere shall be closed within one hour.
[Sec. 3D-0524, 40 CFR 60.753(e)]
 - vii) If monitoring demonstrates that the operational requirements of the NSPS and conditions 3(b) through (g) are not met, corrective action shall be taken as specified in Section 60.755(a)(3) through (5) or Section 60.755(c), and conditions **3.1(A)(7)(a) through (c)**. If such corrective action is taken, the monitored exceedance is not a violation of these operational standards.
[Sec. 3D-0524, 40 CFR 60.753(g)]
- d) The permittee may establish a higher operating temperature, nitrogen, or oxygen value at extraction wells upon approved demonstration to this office.
[Sec. 3D-0524, 40 CFR 60.753(c)]
- 6) **Compliance provisions** - Except as provided in 40 CFR 60.752(b)(2)(i)(B), and permit condition **3.1(A)(1)(b)**, paragraphs (a)(1) through (a)(6) of 40 CFR 60.755 and the following conditions shall be used to determine whether the gas collection system is in compliance with 40 CFR 60.752(b)(2)(ii) and permit condition **3.1(A)(2)**:
- a) To determine compliance with 40 CFR 60.752(b)(2)(ii)(A)(1) and permit condition **3.1(A)(2)(a)**, the permittee shall use the most appropriate equation found in 40 CFR 60.755(a)(1) to calculate the maximum expected gas generation flow rate.
[Sec. 3D-0524, 40 CFR 60.755(a)(1)]
 - b) For the purposes of determining sufficient density of gas collection devices for compliance with 40 CFR 60.752(b)(2)(ii)(A)(2) and permit condition **3.1(A)(2)(c)**, the permittee shall design a system of vertical wells, horizontal collectors, or other collection devices, subject to approval by this Office, capable of controlling and extracting enough LFG from all portions of the landfill to sufficiently meet all operational and performance standards.
[Sec. 3D-0524, 40 CFR 60.755(a)(2)]
 - c) The permittee shall place each collection well and/or design component as specified in the approved LFG CCS design plan.
[Sec. 3D-0524, 40 CFR 60.755(b)]
 - d) Each collection well shall be installed within 60 days of the date on which the initial solid waste has been in place for 5 years or more, if active, or 2 years or more, if closed, or at final grade.

- [Sec. 3D-0524, 40 CFR 60.755(b)]
- e) To demonstrate that the gas collection system flow rate is sufficient to determine compliance with 40 CFR 60.752(b)(2)(ii)(A)(3) and permit condition **3.1(A)(2)(d)**, the permittee shall comply with all applicable provisions relating to monitoring of collection well header pressure and corrective action procedures set forth in 40 CFR 60.755(a)(3) and permit condition **3.1(A)(7)(b)**.
[Sec. 3D-0524, 40 CFR §60.755(a)(3)]
- f) In order to determine whether excess air infiltration into the landfill is occurring, the permittee shall conduct all applicable monitoring procedures pursuant to 40 CFR 60.753(c) and permit condition **3.1(A)(7)(c)**.
[Sec. 3D-0524, 40 CFR §60.755(a)(5)]
- g) To determine compliance with the surface methane requirements of 40 CFR 60.753(d) and permit condition **3.1(A)(5)(d)**, the permittee shall conduct monitoring and take corrective action(s) as required by 40 CFR 60.755(c), set forth in permit condition **3.1(A)(7)(d)**.
[Sec. 3D-0524, 40 CFR 60.755(c)]

7) **Monitoring and Corrective Action Requirements**

a) **Gauge Pressure Monitoring**

- i) The permittee shall measure gauge pressure in the LFG collection system header at each individual well no less than once per month.
[Sec. 3D-0524, 40 CFR 60.755(a)(3)]
- ii) If a positive pressure reading is measured, action shall be initiated to correct the exceedance within 5 calendar days, except when there exists one or more of the three (3) conditions noted in 40 CFR 60.753(b) and permit condition **3.1(A)(5)(b)**.
[Sec. 3D-0524, 40 CFR 60.756(a)(1)]
- iii) If negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement, the LFG collection system shall be expanded to correct the exceedance within 120 days of the initial measurement of positive pressure. Any attempted corrective action measure shall not cause exceedances of any other operational or performance standard. An alternate timeline for correcting the exceedance may be submitted to this Office for approval.
[Sec. 3D-0524, 40 CFR §60.755(a)(3)]
- iv) The permittee will not be required to install additional collection wells as required in paragraph (7)(c) above during the first 180 days after the LFG collection system start-up.
[Sec. 3D-0524, 40 CFR §60.755(a)(4)]

b) **Temperature and Air Infiltration Monitoring**

- i) At each collection wellhead, the permittee shall install a sampling port and thermometer (or other appropriate temperature measuring device), or an access port for the measurement of well temperature.
[Sec. 3D-0524, 40 CFR 60.756(a)]
- ii) To identify whether excess air infiltration is occurring, the permittee shall monitor each well no less than once per month for temperature and nitrogen or oxygen, as provided in 40 CFR 60.753(c) and 60.756(a)(2) and permit condition **3.1(A)(5)(c)**.
- iii) If a collection well exceeds one of the operating parameters described in (b)(i) or (b)(ii) above, action shall be initiated to correct the exceedance within 5 calendar days.
- iv) If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the LFG collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of any other operational or performance standard.
[Sec. 3D-0524, 40 CFR 60.755(a)(5) and 60.753(a)(2)]

c) **Methane surface concentration monitoring**

- i) On a *quarterly* basis following installation of the LFG collection system, the permittee shall conduct monitoring of surface methane concentrations of along the entire perimeter of each collection area. The monitoring shall proceed along a pattern that either traverses the landfill at 30 meter intervals, or a follows a site specific spacing established under condition (7)(c)(ii) below.
[Sec. 3D-0524, 40 CFR 60.755(c)(1)]
- ii) Surfacing methane monitoring shall be conducted in accordance with the surface monitoring design plan as approved by this Office, which includes a topographical map denoting the terrain of the monitoring route. The permittee may establish an alternative traversing pattern that ensures equivalent coverage, providing the rationale for any site-specific deviations in the monitoring design plan is approved by this Office prior to establishment. A new or amended surface monitoring design plan shall be submitted to this Office for approval when changes to the collection and control system design plan occur as the LFG collection and control system is expanded. Areas with steep slopes or other dangerous areas may be excluded from the surface methane testing plan.
[Sec. 3D-0524, 40 CFR 60.753(d)]
- iii) The permittee shall follow all applicable equipment and instrumentation specifications, calibration requirements, monitoring condition requirements, and testing methods and procedures specified in 40 CFR 60.755.
[Sec. 3D-0524, 40 CFR 60.755(c) and (d)]
- iv) Any reading of 500 parts per million or more above background at any location shall be recorded as a monitored exceedance and the corrective action procedures set forth in 40 CFR 60.755(c)(4)(i)-(v) shall be taken. The monitored exceedance is *not* considered a violation of the operational requirements of 40 CFR 60.753(d) or permit condition **3.1(A)(5)(c)(iii)** as long as all required actions specified are performed.
[Sec. 3D-0524, 40 CFR 60.755(c)(4)]
- v) For any location where monitored methane concentration equals or exceeds 500 parts per million (ppm) above background three (3) times within a quarterly period, a new collection well (or other appropriate collection device) shall be installed within 120 calendar days of the initial measured exceedance. An alternative remedy and a corresponding time line for installation may be submitted to this Office for approval.
[Sec. 3D-0524, 40 CFR 60.755(c)(4)(v)]
- vi) Upon closure of the landfill, if there are no monitored exceedances of the surface methane operational standard in three (3) consecutive quarterly monitoring periods, the permittee may change to an annual monitoring schedule. If a methane reading of 500 ppm or more above background is detected during an annual monitoring event, however, the permittee shall return to a quarterly monitoring schedule.
[Sec. 3D-0524, 40 CFR 60.756(f)]
- vii) For capped areas of the landfill, the permittee shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.
[Sec. 3D-0524, 40 CFR 60.755(c)(5)]

8) **Recordkeeping Requirements**

- a) All required records and/or documentation shall be kept up-to-date and readily accessible. If records are maintained off-site, they shall be retrievable within four (4) hours. Paper and/or electronic formats are acceptable.
[Sec. 3Q-0508(f), Sec. 3D-0524 and 40 CFR 60.758(a) – (e)]
- b) The permittee shall keep for at least five (5) years records of the design capacity report which originally triggered 40 CFR 60.752(b), the current amount of solid waste in-place, and the year-by-year waste acceptance rate.

- [Sec. 3Q-0508(f), Sec. 3D-0524 and 40 CFR 60.758(a)]
- c) The permittee shall maintain records for the life of the control equipment of the data listed below as measured during the initial performance test. Records of subsequent tests or monitoring shall be maintained for a minimum of five (5) years. Records of the control device vendor specifications shall be maintained until removal.
[Sec. 3Q-0508(f), Sec. 3D-0524 and 40 CFR 60.758]
- i) The maximum expected gas generation flow rate of the collection system as calculated in 40 CFR 60.755(a)(1) or as calculated by another method, if the method has been approved by this Office.
[Sec. 3Q-0508(f), Sec. 3D-0524 and 40 CFR 60.758(b)(1)(i)]
- ii) The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in Section 60.759(a)(1) and permit condition **3.1(A)(3)**.
[Sec. 3Q-0508(f), Sec. 3D-0524 and 40 CFR 60.758(b)(1)(ii)]
- iii) The flare type, all visible emission readings, heat content determination, flow rate or bypass flow rate measurements, and exit velocity determinations made during the performance test as specified in 40 CFR 60.18.
[Sec. 3Q-0508(f), Sec. 3D-0524 and 40 CFR 60.758(b)(4)]
- iv) During all periods when the permittee is seeking to comply with 40 CFR 60.750 *et seq.* by use of an open flare, continuous records of the flame or flare pilot flame monitoring specified under 40 CFR 60.756(c), and records of all periods during which the pilot flame of the flare flame is absent.
[Sec. 3Q-0508(f), Sec. 3D-0524 and 40 CFR 60.758(b)(4)]
- d) The permittee shall keep for at least five (5) years continuous records of the equipment operating parameters specified in section 60.756 and permit condition **3.1(A)(5)** as well as records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.
[Sec. 3Q-0508(f), Sec. 3D-0524 and 40 CFR 60.758(c)(2)]
- e) The permittee shall keep continuous records of the indication of flow to the control device and/or the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines, specified under 40 CFR 60.756 and permit condition **3.1(A)(5)(f)**.
[Sec. 3Q-0508(f), Sec. 3D-0524 and 40 CFR 60.758(c)]
- f) The permittee shall keep for the life of the collection system a plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector.
[Sec. 3Q-0508(f), Sec. 3D-0524 and 40 CFR 60.758(d)]
- g) The permittee shall keep records of the installation date and location of all newly installed collectors as specified under 40 CFR 60.755(b) and permit conditions **3.1(A)(6)(b)**.
[Sec. 3Q-0508(f), Sec. 3D-0524 and 40 CFR 60.758(d)]
- h) The permittee shall keep documentation of the nature, date of deposition, amount, and location of asbestos-containing or non-degradable waste excluded from collection as well as any nonproductive areas excluded from collection pursuant to 40 CFR 60.759(a)(3)(i) and (ii) and permit condition **3.1(A)(3)(e)**.
[Sec. 3Q-0508(f), Sec. 3D-0524 and 40 CFR 60.758(d)]
- i) The permittee shall keep for at least five (5) years records of all collection and control system exceedances of the operational standards in 40 CFR 60.753 and permit condition **3.1(A)(5)**.
[Sec. 3Q-0508(f), Sec. 3D-0524 and 40 CFR 60.758(e)]
- 9) **Reporting Requirements** - [Sec. 3Q-0508(f), 40 CFR 60.757 and 40 CFR 63.1980(a)]
- a) **Collection and Control System Compliance Report** - The permittee shall submit to this

Office, on or before January 30 for the period from July to December and on or before July 30 for the period from January through June, reports of the information recorded pursuant to 40 CFR 60.757(f)(1) through (6) and paragraphs (i) through (vi), below. Reportable exceedances for flares are defined under 40 CFR 60.758(c). The report shall include:

- i) Value and length of time for exceedance of applicable parameters monitored under 40 CFR 60.756(a), (b), (c), and (d) and permit conditions **3.1(A)(7)**.
- ii) Description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified under Sec. 60.756 and permit conditions **3.1(A)(5)**.
- iii) Description and duration of all periods when the control device was not operating for a period exceeding 1 hour and length of time the control device was not operating.
- iv) All periods when the collection system was not operating in excess of five (5) days.
- v) The location of each exceedance of the 500 ppm methane concentration recorded at each location for which an exceedance was recorded in the previous month.
- vi) The date of installation and the location of each well or collection system expansion added pursuant to 40 CFR 60.755(a)(3), (b), and (c)(4).
- vii) The permittee shall note that 40 CFR Part 63, Subpart AAAA and Condition **3.1(B)(3)** requires that this report be submitted every six (6) months.

[Sec. 3D-0524, 40 CFR §60.757(f), 40 CFR 63.1955(c) and 63.1980(a) and (b)]

b) Closure report

- i) The permittee shall submit a closure report to this Office within 30 days of the cessation of waste acceptance.
- ii) This Office 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.
- iii) If a closure report has been submitted, no additional waste may be placed into the landfill without filing a notification of modification as described under 40 CFR 60.7(a)(4).

[Sec. 3D-0524, 40 CFR 60.757(d)]

c) Equipment Removal Report

- i) The permittee shall submit an equipment removal report to this Office 30 days prior to removal or cessation of operation of the control equipment. This Office may request additional information as may be necessary to verify that all of the conditions for removal in 40 CFR 60.752(b)(2)(ii) have been met, but the report shall contain all of the following items:
 - A) A copy of the closure report submitted in accordance with paragraph (b), above;
 - B) A copy of the initial performance test report demonstrating that the fifteen (15) year minimum control period has expired; and,
 - C) Dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 50 megagrams or greater of NMOC per year.

[Sec. 3D-0524, 40 CFR 60.757(e)]

B) 40 CFR 63, Subpart AAAA: National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills (Sec. 3D-1110)

- 1) **Standard** - The permittee shall comply with all applicable standards and provisions, including the notification, testing, work practices, reporting, recordkeeping, and monitoring requirements of FCAQTC Sec. 3D-1110, "National Emission Standards for Hazardous Air Pollutants" (NESHAP), promulgated in 40 CFR Part 63, Subpart AAAA, including all applicable requirements and provisions specified by the general provisions of the National Emission Standards for Hazardous Air Pollutants (40 CFR 63, Subpart A).

[Sec. 3D .1110, 40 CFR 63.1930 *et seq.*]

- a) The permittee shall comply with this standard by complying with all applicable requirements of 40 CFR 60, Subpart WWW, including (but not limited to) performance testing, monitoring of the collection system, continuous parameter monitoring, and other credible evidence.
[Sec. 3D .1110, 40 CFR 63.1955(b) and 63.1960]
 - b) Continuous parameter monitoring data, collected under the provisions of 40 CFR 60, Subpart WWW shall be used to demonstrate compliance with the operating conditions for the permittee's LFG control systems.
[Sec. 3D-1110, 40 CFR 63.1960]
 - c) With the exceptions noted in 40 CFR 63.1955(c), any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions, that have been approved by this Office as allowed under 40 CFR 60, Subpart WWW and condition **3.1(A)(1)(b)** may be used to demonstrated compliance with the NESHAP MACT,
[Sec. 3D-1110, 40 CFR 63.1955(c)]
 - d) For approval of alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions, the permittee must follow the procedures of 40 CFR 60.752(b)(2) and permit condition **3.1(A)(1)(b)**.
[Sec. 3D-1110, 40 CFR 63.1955(c)]
 - e) If a deviation, as defined in 40 CFR 63.1990 or permit condition **3.1(B)(1)(h)**, occurs, the permittee has failed to meet the control device operating conditions of the NESHAP and has deviated from its requirements.
[Sec. 3D .1110, 40 CFR 63.1960]
 - f) The provisions of subpart AAAA apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed five (5) days for collection systems and shall not exceed 1 hour for treatment or control devices.
[Sec. 3D-1111, 40 CFR 63.1960, 40 CFR 60.755(e)]
 - g) The permittee shall develop, implement, and maintain on-site a written Start-up / Shutdown / Malfunction (SSM) plan pursuant to the provisions set forth in 40 CFR 63.6(e)(3).
[Sec. 3D-1111, 40 CFR 63.1960]
 - h) For the purposes of the landfill monitoring and SSM plan requirements, deviations are defined as:
 - i) Whenever the control device operating parameter boundaries described in 40 CFR 60.758(c)(1) are exceeded;
 - ii) Whenever one hour or more of the hours during the three-hour block averaging period does not constitute a valid hour of data. A valid hour of data must have measured values for at least three 15-minute monitoring periods within the hour;
 - iii) When a SSM plan is not developed, implemented, or maintained on site.
[Sec. 3D-1111, 40 CFR 63.1965]
- 2) **Monitoring** [Sec. 3Q-0508(f) and 40 CFR 63.1960]
The permittee shall monitor the CCS pursuant to 40 CFR §60.750 *et seq.* and Condition **3.1(A)(7)**.
- 3) **Recordkeeping Requirements** [Sec. 3Q-0508(f) and 40 CFR 63.1980]
- a) The permittee shall maintain all records specified in 40 CFR Part 60, Subpart WWW.
 - b) The permittee shall maintain records as specified in the general provisions; 40 CFR Part 60, Subpart A.
 - c) The permittee shall maintain the following records as specified in Table 1 of 40 CFR Part 63, Subpart AAAA, noting the applicable NESHAP General Provisions:
 - i) Records of all SSMs,

- ii) Records of all required maintenance, and
- iii) Records of all actions taken during startup or shutdown whenever applicable emission limitations are exceeded and actions taken differ from those specified in the SSM plan. [Sec. 3D-1111, 40 CFR 63.1980, §63.1990 and §63.10(d)(5)]

4) **Reporting Requirements -**

- a) A semi-annual "Collection and Control System Report", as described in 40 CFR 60.757(f), and required by Condition 3.1(A)(9)(a), must be submitted to this Office no later than July 30 and January 30 for each preceding semi-annual period.
- b) SSM reports, containing the information specified in 40 CFR 63.10(d)(5) shall be submitted to this Office no later than July 30 and January 30 for each preceding semi-annual period.
- c) If actions taken during startup, shutdown, or malfunction events (or if actions taken to correct a malfunction) result in an emissions exceedance and are inconsistent with the SSM, then the permittee shall report such actions to this Office within (2) working days after commencing such actions. This report shall be followed by a formal letter submitted to this Office seven (7) days after the event. [Secs. 3Q-0508(f) and 3D-1111, 40 CFR 63.1980, §63.1990, and §63.10(d)(5)]

3.2 **UTILITY FLARE (Landfill Gas Specialties CF-103018 with AeroVent blower - ID No. CD-02)**

Table 3.2: Summary of Emission Limits, Standards and Other Applicable Requirements.

Regulated Pollutant	Applicable Standard	Applicable Regulation
visible emissions	no visible emissions	3D-0524 New Source Performance Standards and 40 CFR Part 60, Subpart WWW, and 40 CFR Part 60, Subpart A, General Provisions, Section 60.18(c)(1)
NMOC	flame present at all times	3D-0524 New Source Performance Standards and 40 CFR Part 60, Subpart WWW, and 40 CFR Part 60, Subpart A, General Provisions, Section 60.18(c)(2)
NMOC	maximum exit velocity 60 ft/sec	3D-0524 New Source Performance Standards and 40 CFR Part 60, Subpart WWW, and 40 CFR Part 60, Subpart A, General Provisions, Section 60.18(c)(3)(iii) and 60.18(f)(5)
Sulfur dioxide (SO ₂)	SO ₂ emissions less than 2.3 lb/MMBtu	Sec. 3D-0516, "Sulfur Dioxide Emissions from Combustion Sources"

A) Standards of Performance for New Stationary Sources: Municipal Solid Waste Landfills (Secs. 3D-0524 and 40 CFR Part 60, Subpart WWW, as referenced by Section number)

- 1) **Standard - [Sec. 3D-0524]** - The permittee shall comply with all applicable standards and provisions, including the notification, testing, work practices, reporting, recordkeeping, and monitoring requirements of Sec. 3D-0524, "New Source Performance Standards" (NSPS), promulgated in 40 CFR Part 60, Subpart WWW, including all applicable requirements and provisions specified by the general provisions of the NSPS found in **40 CFR 60, Subpart A.**
 - a) Utility Flare CD-02 shall be designed and operated at all times in accordance with all applicable provisions of 40 CFR 60.18. [Sec. 3D-0524, 40 CFR §60.752(b)(2)(iii)(A)]

- b) Utility Flare CD-02 shall be operated with no visible emissions as determined by 40 CFR 60, Appendix A-7, Method 22 (as specified in 40 CFR 60.18(f)), except for periods not to exceed a total of five (5) minutes during any two (2) consecutive hours, and except during periods of startup, shutdown, and malfunction.
- c) During all periods when the permittee is seeking to comply with 40 CFR 60.750 *et seq.* by use of CD-02, the flare shall be operated with a flame present at all times as determined by the methods specified in 40 CFR 60.18(f) and permit **Condition 3.2(A)(2)**.
[Sec. 3D-0524, 40 CFR §60.752(b)(2)(iii)(A)]
- d) The utility flare, CD-02, shall combust no LFG with net heating value of less than 200 Btu/scfm, as determined by the equation provided in 40 CFR 60.18(f)(3).
[Sec. 3D-0524, 40 CFR §§60.752(b)(2)(iii)(A) and 60.18(c)(3)(ii)]
- e) CD-02 shall be operated with an exit velocity no greater than 60 feet per second.
[Sec. 3D-0524, 40 CFR 60.752(b)(2)(iii)(A) and 60.18(c)(3)(ii)]
- f) The provisions of 40 CFR 60, Subpart WWW apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed five (5) days for collection systems, and shall not exceed one (1) hour for treatment and/or control devices.
[Sec. 3D-0524, 40 CFR 60.755(e)]

2) Monitoring

- a) During all periods when the permittee is seeking to comply with 40 CFR 60.750 *et seq.* by use of Utility Flare CD-02, the permittee shall perform no less than one (1) daily observation of the flare to determine if visible emissions (VE) are present.
 - i) This observation shall be conducted for at least five (5) consecutive minutes.
 - ii) If VE are observed during this observation, the permittee shall, within thirty (30) minutes of observing VE, conduct a Method 22 observation for two (2) hours (as specified in 40 CFR 60.18(f)).
[Sec. 3Q-0508(f) and 40 CFR 60.756 and 60.18]
- b) During all periods when the permittee is seeking to comply with 40 CFR 60.750 *et seq.* by use of Utility Flare CD-02, the permittee shall install, calibrate, maintain, and operate, according to the manufacturer and/or vendor specifications, the following equipment:
 - i) A heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light (or the flame itself) to indicate the continuous presence of a flame.
 - ii) A device that records LFG flow to and/or bypass from the flare. The permittee shall either:
 - (A) install, calibrate, and maintain a LFG flow rate measuring device that shall record the flow to the flare at least every 15 minutes, or
 - (B) secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A **visual inspection** of the seal or closure mechanism shall be performed **at least once every month** to ensure that the valve is maintained in the closed position, and that the LFG flow is not diverted through the bypass line.
[Sec. 3Q-0508(f) and 40 CFR 60.756(c) and §60.18]

3) Recordkeeping

- a) When the permittee is seeking to comply with 40 CFR 60.750 *et seq.* by use of Utility Flare CD-02, the permittee shall keep a log of the daily flare observations conducted as specified in **Condition 3.2(A)(2)(a)**.
 - i) The log of daily flare observations shall contain the following entries:
 - (A) the date and time of visual observation(s),
 - (B) the person(s) who performed visual observation(s),
 - (C) where emissions are observed, the operating conditions under which the visual

C) Sulfur Dioxide Emissions from Combustion Sources (Sec. 3D-0516)

- 1) **Standard** - Emissions of sulfur dioxide from CD-02, the utility flare, shall *not exceed* 2.3 pounds of sulfur dioxide per million Btu input.
- 2) **Monitoring, Recordkeeping, Reporting** - [Sec. 3Q-0508(f)] - No monitoring, recordkeeping, or reporting is required for the permittee to comply with the requirements of Sec. 3D-0516.
[Sec. 3D-0516]

**SECTION 4
CONTROL OF TOXIC AIR POLLUTANTS - LOCAL ENFORCEMENT ONLY**

4.1 Applicable Regulatory Requirements for TAP Sources - The Hanes Mill Road landfill facility is subject to **Section 3D-1100** of the Forsyth County Air Quality Technical Code (FCAQTC), and is only enforceable locally. All emission sources and associated air pollution control device(s) in operation at the landfill are subject to the following specific terms, conditions, and limitations, including monitoring, recordkeeping, and reporting requirements as applicable.

A) **Toxic Air Pollutants (TAP) - General** - Specification of a listed TAPs in this permit does not excuse the permittee from complying with the requirements of Sections 3D-1100 and 3Q-0700 of the FCAQTC with regard to any other listed TAP emitted from the regulated facility, nor does this permit exempt the permittee from compliance with any future air toxics regulations promulgated pursuant to the requirements of the United States Clean Air Act.
[Sections 3D-1100 and 3Q-0700]

B) De minimis Limits

1) Total facility-wide emissions of the pollutants listed in **Table 4.1** shall not exceed their respective de minimis emissions limits pursuant to Sec. 3Q-0711.

Table 4.1, Sec. 3Q-0711 Air Toxics Facility-wide De minimus Emission Rates

Pollutant (CAS Number)	De minimis level
1,1,1 trichlorethane (71556)	8.1 lb/yr
1,1,2,2,tetrachlorethane (79-34-5)	430 lb/yr
ethylene dichloride (107-06-2)	260 lb/yr
acrilonitrile (107-13-1)	10 lb/yr
carbon disulfide (75-15-0)	3.9 lb/day
carbon tetrachloride (56-23-5)	460 lb/yr
chlorobenzene (108-90-7)	46 lb/day
chloroform (67-66-3)	290 lb/yr
dichlorobenzene (106-46-7)	16.8 lb/hr
dichlorodifluoromethane (75-71-8)	5200 lb/day
dichlorofluoromethane (75-43-4)	10 lb/day
ethyl mercaptan (75-08-1)	0.025 lb/hr
ethylene dibromide (106-93-4)	27 lb/yr
hexane (110-54-3)	23 lb/day
mercury and compounds (199)	0.013 lb/day
methyl ethyl ketone (78-93-3)	78 lb/day and 22.4 lb/hr
methyl isobutyl ketone (108-10-1)	52 lb/day and 7.6 lb/hr
perchloroethylene (127-18-4)	13000 lb/yr
toluene (108-88-3)	98 lb/day
trichloroethylene (79-01-6)	4000 lb/yr
xylene (1330-20-7)	57 lb/day and 16.4 lb/hr

2) The permittee may submit for Office approval, a dispersion modeling demonstration is submitted and approved by this Office which shows that the emissions of the subject TAPs

from the facility will not pose an increased risk to human health.

- 3) Any modeling demonstration submitted to this Office for approval shall be produced in accordance with the requirements set forth in Sections 3D-1100 and 3Q-0700 of the FCAQTC, and must be completed using the most recently promulgated version of a U.S. EPA approved computer dispersion model.

[Sec. 3Q-0700]

C) Dispersion Modelling Emission Limits

- 1) Combined emissions of the TAPs from all sources not exempted by Sec. 3Q-0702(a) and (b) at this facility shall not exceed the emission rates listed in **Table 4.2** below.
- 2) The emission rates listed in **Table 4.2** shall be used as a basis for certifying that any future modifications or changes in the methods of operation will result in ambient impacts below their Ambient Allowable Limits (AAL).
- 3) In no case shall actual emissions resulting from changes or modifications exceed any of the following emission rates without first applying for and receiving a modified permit.
- 4) Upon approval by this Office, the permittee may submit an analysis calculated using the results of a previous modeling in lieu of a revised modeling demonstration showing compliance with the acceptable ambient levels (AAL) for the pollutants listed in **Table 4.2**.

[Secs. 3D-1100 and 3D-1104]

Table 4.2, Air Toxics Maximum Facility-wide Modeled Emission Rates

Pollutant	Maximum Emission Rate
benzene (71-43-2)	155.39 lb/yr
vinyl chloride (75-01-4)	137.77 lb/year
hydrogen sulfide (7783-06-4)	4.51 lb/day

D) Toxic Air Pollutant Recordkeeping Requirements

- 1) The permittee shall maintain updated records of production rates, throughputs, material usage, and other process operational information as is necessary to determine compliance with the emission rates specified in permit conditions **4(B) and (C)**.
- 2) At a minimum these records shall include data sufficient to calculate monthly averaged emission rates (in pounds per hour of emission source operation) for TAPs with 1-hour or 24-hour emission limits and annual emission rates (in pounds per calendar year) for TAPs with annual emission limits.
- 3) Copies of these records shall be retained by the permittee for a period of three (3) years after the date on which the record was made.
- 4) The permittee shall readily supply copies of these records at the time of inspection, or at any time if requested by an agent of this Office.

[Sections 3D-0605, 3D-1105, and 3Q-0308(a)(1)]

- E) Toxic Air Pollutant Reporting Requirements** - No reporting is required to demonstrate compliance with these requirements.