

09-00210



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

### **TITLE V/STATE OPERATING PERMIT**

Issue Date:	March 9, 2020	Effective Date:	April 1, 2020	
Expiration Date:	March 31, 2025			

In accordance with the provisions of the Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, as amended, and 25 Pa. Code Chapter 127, the Owner, [and Operator if noted] (hereinafter referred to as permittee) identified below is authorized by the Department of Environmental Protection (Department) to operate the air emission source(s) more fully described in this permit. This Facility is subject to all terms and conditions specified in this permit. Nothing in this permit relieves the permittee from its obligations to comply with all applicable Federal, State and Local laws and regulations.

The regulatory or statutory authority for each permit condition is set forth in brackets. All terms and conditions in this permit are federally enforceable applicable requirements unless otherwise designated as "State-Only" or "non-applicable" requirements.

#### TITLE V Permit No: 09-00210

Federal Tax Id - Plant Code: 26-3468180-1

Owner Information				
Name: WASTE MGMT OF FAIRLESS LLC	C			
Mailing Address: 1000 NEW FORD MILL RD				
MORRISVILLE, PA 19067-3704				
	Plant Information			
Plant: WASTE MGMT OF FAIRLESS/FAIRLESS LDFL				
Location: 09 Bucks County	09002 Falls Township			
SIC Code: 4953 Trans. & Utilities - Refuse Systems				
	Responsible Official			
Name: ROBERT C JONES				
Title: DIST MGR II				
Phone: (215) 428 - 4390				
Permit Contact Person				
Name: BRIAN P BOLVIN PE				
Title: SITE ENGR				
Phone: (215) 428 - 4384				
[Signature]				
JAMES D. REBARCHAK, SOUTHEAST REGION AIR PROGRAM MANAGER				





### **SECTION A. Table of Contents**

### Section A. Facility/Source Identification

Table of Contents Site Inventory List

### Section B. General Title V Requirements

- #001 Definitions
- #002 Prohibition of Air Pollution
- #003 Property Rights
- #004 Permit Expiration
- #005 Permit Renewal
- #006 Transfer of Ownership or Operational Control
- #007 Inspection and Entry
- #008 Compliance Requirements
- #009 Need to Halt or Reduce Activity Not a Defense
- #010 Duty to Provide Information
- #011 Reopening and Revising the Title V Permit for Cause
- #012 Reopening a Title V Permit for Cause by EPA
- #013 Operating Permit Application Review by the EPA
- #014 Significant Operating Permit Modifications
- #015 Minor Operating Permit Modifications
- #016 Administrative Operating Permit Amendments
- #017 Severability Clause
- #018 Fee Payment
- #019 Authorization for De Minimis Emission Increases
- #020 Reactivation of Sources
- #021 Circumvention
- #022 Submissions
- #023 Sampling, Testing and Monitoring Procedures
- #024 Recordkeeping Requirements
- #025 Reporting Requirements
- #026 Compliance Certification
- #027 Operational Flexibility
- #028 Risk Management
- #029 Approved Economic Incentives and Emission Trading Programs
- #030 Permit Shield
- #031 Reporting
- #032 Report Format

### Section C. Site Level Title V Requirements

- C-I: Restrictions
- C-II: Testing Requirements
- C-III: Monitoring Requirements
- C-IV: Recordkeeping Requirements
- C-V: Reporting Requirements
- C-VI: Work Practice Standards
- C-VII: Additional Requirements
- C-VIII: Compliance Certification
- C-IX: Compliance Schedule

### Section D. Source Level Title V Requirements

- D-I: Restrictions
- D-II: Testing Requirements
- D-III: Monitoring Requirements
- D-IV: Recordkeeping Requirements
- D-V: Reporting Requirements





**SECTION A. Table of Contents** 

- D-VI: Work Practice Standards
- D-VII: Additional Requirements

Note: These same sub-sections are repeated for each source!

#### Section E. Source Group Restrictions

- E-I: Restrictions
- E-II: Testing Requirements
- E-III: Monitoring Requirements
- E-IV: Recordkeeping Requirements
- E-V: Reporting Requirements
- E-VI: Work Practice Standards
- E-VII: Additional Requirements

#### Section F. Alternative Operating Scenario(s)

- F-I: Restrictions
- F-II: Testing Requirements
- F-III: Monitoring Requirements
- F-IV: Recordkeeping Requirements
- F-V: Reporting Requirements
- F-VI: Work Practice Standards
- F-VII: Additional Requirements

#### Section G. Emission Restriction Summary

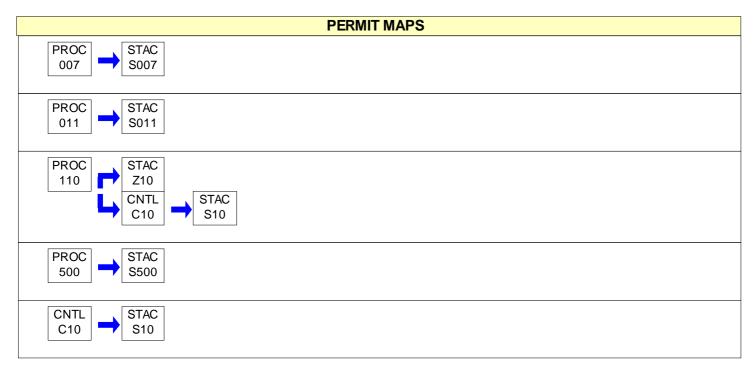
Section H. Miscellaneous





SECTION A. Site Inventory List

Source	ID Source Name	Capacity/Throughput	Fuel/Material
007	SEQUENTIAL BATCH REACTOR (TK-5)	12,500.000 Gal/HR	LEACHATE
011	SEQUENTIAL BATCH REACTOR (TK-6)	12,500.000 Gal/HR	LEACHATE
110	MSW LANDFILL - FAIRLESS		
500	EXEMPT EMERGENCY GENERATOR ENGINES		
C10	BACK-UP ENCLOSED FLARE FAIRLESS 1	300.000 MCF/HR	LANDFILL GAS
S007	SBR (TK-5) STACK		
S011	SBR (TK-6) STACK		
S10	BACK-UP ENCLOSED FLARE (C10) STACK		
S500	EXEMPT EMERGENCY GENERATOR STACKS		
Z10	FACILITY FUGITIVES - FAIRLESS		







#001 [25 Pa. Code § 121.1]				
Definitions				
Words and terms that are not otherwise defined in this permit shall have the meanings set forth in Section 3 of the Air Pollution Control Act (35 P.S. § 4003) and 25 Pa. Code § 121.1.				
#002 [25 Pa. Code § 121.7]				
Prohibition of Air Pollution				
No person may permit air pollution as that term is defined in the act.				
#003 [25 Pa. Code § 127.512(c)(4)]				
Property Rights This permit does not convey property rights of any sort, or any exclusive privileges.				
#004 [25 Pa. Code § 127.446(a) and (c)]				
Permit Expiration				
This operating permit is issued for a fixed term of five (5) years and shall expire on the date specified on Page 1 of this permit. The terms and conditions of the expired permit shall automatically continue pending issuance of a new Title V permit, provided the permittee has submitted a timely and complete application and paid applicable fees required under 25 Pa. Code Chapter 127, Subchapter I and the Department is unable, through no fault of the permittee, to issue or deny a new permit before the expiration of the previous permit. An application is complete if it contains sufficient information to begin processing the application, has the applicable sections completed and has been signed by a responsible official.				
#005 [25 Pa. Code §§ 127.412, 127.413, 127.414, 127.446(e) & 127.503]				
Permit Renewal				
(a) An application for the renewal of the Title V permit shall be submitted to the Department at least six (6) months, and not more than 18 months, before the expiration date of this permit. The renewal application is timely if a complete application is submitted to the Department's Regional Air Manager within the timeframe specified in this permit condition.				
(b) The application for permit renewal shall include the current permit number, the appropriate permit renewal fee, a description of any permit revisions and off-permit changes that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term.				
(c) The renewal application shall also include submission of proof that the local municipality and county, in which the facility is located, have been notified in accordance with 25 Pa. Code § 127.413. The application for renewal of the Title V permit shall also include submission of compliance review forms which have been used by the permittee to update information submitted in accordance with either 25 Pa. Code § 127.412(b) or § 127.412(j).				
(d) The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information during the permit renewal process. The permittee shall also promptly provide additional information as necessary to address any requirements that become applicable to the source after the date a complete renewal application was submitted but prior to release of a draft permit.				
#006 [25 Pa. Code §§ 127.450(a)(4) & 127.464(a)]				
Transfer of Ownership or Operational Control (a) In accordance with 25 Pa. Code § 127.450(a)(4), a change in ownership or operational control of the source shall be treated as an administrative amendment if:				
(1) The Department determines that no other change in the permit is necessary;				
(2) A written agreement has been submitted to the Department identifying the specific date of the transfer of permit responsibility, coverage and liability between the current and the new permittee; and,				
(3) A compliance review form has been submitted to the Department and the permit transfer has been approved by the Department.				





(b) In accordance with 25 Pa. Code § 127.464(a), this permit may not be transferred to another person except in cases of transfer-of-ownership which are documented and approved to the satisfaction of the Department.

# #007 [25 Pa. Code § 127.513, 35 P.S. § 4008 and § 114 of the CAA] Inspection and Entry (a) Upon presentation of credentials and other documents as may be required by law for inspection and entry purposes, the permittee shall allow the Department of Environmental Protection or authorized representatives of the Department to perform the following: (1) Enter at reasonable times upon the permittee's premises where a Title V source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit; (2) Have access to and copy or remove, at reasonable times, records that are kept under the conditions of this permit; (3) Inspect at reasonable times, facilities, equipment including monitoring and air pollution control equipment, practices, or operations regulated or required under this permit; (4) Sample or monitor, at reasonable times, substances or parameters, for the purpose of assuring compliance with the permit or applicable requirements as authorized by the Clean Air Act, the Air Pollution Control Act, or the regulations promulgated under the Acts. (b) Pursuant to 35 P.S. § 4008, no person shall hinder, obstruct, prevent or interfere with the Department or its personnel in the performance of any duty authorized under the Air Pollution Control Act. (c) Nothing in this permit condition shall limit the ability of the EPA to inspect or enter the premises of the permittee in accordance with Section 114 or other applicable provisions of the Clean Air Act. #008 [25 Pa. Code §§ 127.25, 127.444, & 127.512(c)(1)] **Compliance Requirements** (a) The permittee shall comply with the conditions of this permit. Noncompliance with this permit constitutes a violation of the Clean Air Act and the Air Pollution Control Act and is grounds for one (1) or more of the following: (1) Enforcement action (2) Permit termination, revocation and reissuance or modification (3) Denial of a permit renewal application (b) A person may not cause or permit the operation of a source, which is subject to 25 Pa. Code Article III, unless the source(s) and air cleaning devices identified in the application for the plan approval and operating permit and the plan approval issued to the source are operated and maintained in accordance with specifications in the applications and the conditions in the plan approval and operating permit issued by the Department. A person may not cause or permit the operation of an air contamination source subject to 25 Pa. Code Chapter 127 in a manner inconsistent with good operating practices. (c) For purposes of Sub-condition (b) of this permit condition, the specifications in applications for plan approvals and operating permits are the physical configurations and engineering design details which the Department determines are essential for the permittee's compliance with the applicable requirements in this Title V permit. #009 [25 Pa. Code § 127.512(c)(2)] Need to Halt or Reduce Activity Not a Defense 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. #010 [25 Pa. Code §§ 127.411(d) & 127.512(c)(5)] **Duty to Provide Information** (a) The permittee shall furnish to the Department, within a reasonable time, information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or DEP Auth ID: 1197585 Page 6





to determine compliance with the permit.

(b) Upon request, the permittee shall also furnish to the Department copies of records that the permittee is required to keep by this permit, or for information claimed to be confidential, the permittee may furnish such records directly to the Administrator of EPA along with a claim of confidentiality.

### #011 [25 Pa. Code §§ 127.463, 127.512(c)(3) & 127.542]

#### Reopening and Revising the Title V Permit for Cause

(a) This Title V 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 does not stay a permit condition.

(b) This permit may be reopened, revised and reissued prior to expiration of the permit under one or more of the following circumstances:

(1) Additional applicable requirements under the Clean Air Act or the Air Pollution Control Act become applicable to a Title V facility with a remaining permit term of three (3) or more years prior to the expiration date of this permit. The Department will revise the permit as expeditiously as practicable but not later than 18 months after promulgation of the applicable standards or regulations. No such revision is required if the effective date of the requirement is later than the expiration date of this permit, unless the original permit or its terms and conditions has been extended.

(2) Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Administrator of EPA, excess emissions offset plans for an affected source shall be incorporated into the permit.

(3) The Department or the EPA determines that this permit contains a material mistake or inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.

(4) The Department or the Administrator of EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

(c) Proceedings to revise this permit shall follow the same procedures which apply to initial permit issuance and shall affect only those parts of this permit for which cause to revise exists. The revision shall be made as expeditiously as practicable.

(d) Regardless of whether a revision is made in accordance with (b)(1) above, the permittee shall meet the applicable standards or regulations promulgated under the Clean Air Act within the time frame required by standards or regulations.

#### #012 [25 Pa. Code § 127.543]

#### Reopening a Title V Permit for Cause by EPA

As required by the Clean Air Act and regulations adopted thereunder, this permit may be modified, reopened and reissued, revoked or terminated for cause by EPA in accordance with procedures specified in 25 Pa. Code § 127.543.

#### #013 [25 Pa. Code § 127.522(a)]

#### **Operating Permit Application Review by the EPA**

The applicant may be required by the Department to provide a copy of the permit application, including the compliance plan, directly to the Administrator of the EPA. Copies of title V permit applications to EPA, pursuant to 25 PA Code §127.522(a), shall be submitted, if required, to the following EPA e-mail box:

R3\_Air\_Apps\_and\_Notices@epa.gov

Please place the following in the subject line: TV [permit number], [Facility Name].

#### #014 [25 Pa. Code § 127.541]

#### **Significant Operating Permit Modifications**

When permit modifications during the term of this permit do not qualify as minor permit modifications or administrative amendments, the permittee shall submit an application for significant Title V permit modifications in accordance with





25 Pa. Code § 127.541. Notifications to EPA, pursuant to 25 PA Code §127.522(a), if required, shall be submitted, to the following EPA e-mail box:

R3\_Air\_Apps\_and\_Notices@epa.gov

Please place the following in the subject line: TV [permit number], [Facility Name].

#### #015 [25 Pa. Code §§ 121.1 & 127.462]

#### **Minor Operating Permit Modifications**

The permittee may make minor operating permit modifications (as defined in 25 Pa. Code §121.1), on an expedited basis, in accordance with 25 Pa. Code §127.462 (relating to minor operating permit modifications). Notifications to EPA, pursuant to 25 PA Code §127.462(c), if required, shall be submitted, to the following EPA e-mail box:

R3\_Air\_Apps\_and\_Notices@epa.gov

Please place the following in the subject line: TV [permit number], [Facility Name].

#### #016 [25 Pa. Code § 127.450]

#### Administrative Operating Permit Amendments

(a) The permittee may request administrative operating permit amendments, as defined in 25 Pa. Code §127.450(a). Copies of request for administrative permit amendment to EPA, pursuant to 25 PA Code §127.450(c)(1), if required, shall be submitted to the following EPA e-mail box:

R3\_Air\_Apps\_and\_Notices@epa.gov

Please place the following in the subject line: TV [permit number], [Facility Name].

(b) Upon final action by the Department granting a request for an administrative operating permit amendment covered under §127.450(a)(5), the permit shield provisions in 25 Pa. Code § 127.516 (relating to permit shield) shall apply to administrative permit amendments incorporated in this Title V Permit in accordance with §127.450(c), unless precluded by the Clean Air Act or the regulations thereunder.

#### #017 [25 Pa. Code § 127.512(b)]

#### **Severability Clause**

The provisions of this permit are severable, and if any provision of this permit is determined by the Environmental Hearing Board or a court of competent jurisdiction, or US EPA to be invalid or unenforceable, such a determination will not affect the remaining provisions of this permit.

### #018 [25 Pa. Code §§ 127.704, 127.705 & 127.707]

#### **Fee Payment**

(a) The permittee shall pay fees to the Department in accordance with the applicable fee schedules in 25 Pa. Code Chapter 127, Subchapter I (relating to plan approval and operating permit fees).

(b) Emission Fees. The permittee shall, on or before September 1st of each year, pay applicable annual Title V emission fees for emissions occurring in the previous calendar year as specified in 25 Pa. Code § 127.705. The permittee is not required to pay an emission fee for emissions of more than 4,000 tons of each regulated pollutant emitted from the facility.

(c) As used in this permit condition, the term "regulated pollutant" is defined as a VOC, each pollutant regulated under Sections 111 and 112 of the Clean Air Act and each pollutant for which a National Ambient Air Quality Standard has been promulgated, except that carbon monoxide is excluded.

(d) Late Payment. Late payment of emission fees will subject the permittee to the penalties prescribed in 25 Pa. Code § 127.707 and may result in the suspension or termination of the Title V permit. The permittee shall pay a penalty of fifty percent (50%) of the fee amount, plus interest on the fee amount computed in accordance with 26 U.S.C.A. § 6621(a)(2) from the date the emission fee should have been paid in accordance with the time frame specified in 25 Pa. Code § 127.705(c).





(e) The permittee shall pay an annual operating permit administration fee according to the fee schedule established in 25 Pa. Code § 127.704(c) if the facility, identified in Subparagraph (iv) of the definition of the term "Title V facility" in 25 Pa. Code § 121.1, is subject to Title V after the EPA Administrator completes a rulemaking requiring regulation of those sources under Title V of the Clean Air Act.

(f) This permit condition does not apply to a Title V facility which qualifies for exemption from emission fees under 35 P.S. § 4006.3(f).

### #019 [25 Pa. Code §§ 127.14(b) & 127.449]

#### Authorization for De Minimis Emission Increases

(a) This permit authorizes de minimis emission increases from a new or existing source in accordance with 25 Pa. Code §§ 127.14 and 127.449 without the need for a plan approval or prior issuance of a permit modification. The permittee shall provide the Department with seven (7) days prior written notice before commencing any de minimis emissions increase that would result from either: (1) a physical change of minor significance under § 127.14(c)(1); or (2) the construction, installation, modification or reactivation of an air contamination source. The written notice shall:

(1) Identify and describe the pollutants that will be emitted as a result of the de minimis emissions increase.

(2) Provide emission rates expressed in tons per year and in terms necessary to establish compliance consistent with any applicable requirement.

The Department may disapprove or condition de minimis emission increases at any time.

(b) Except as provided below in (c) and (d) of this permit condition, the permittee is authorized during the term of this permit to make de minimis emission increases (expressed in tons per year) up to the following amounts without the need for a plan approval or prior issuance of a permit modification:

(1) Four tons of carbon monoxide from a single source during the term of the permit and 20 tons of carbon monoxide at the facility during the term of the permit.

(2) One ton of NOx from a single source during the term of the permit and 5 tons of NOx at the facility during the term of the permit.

(3) One and six-tenths tons of the oxides of sulfur from a single source during the term of the permit and 8.0 tons of oxides of sulfur at the facility during the term of the permit.

(4) Six-tenths of a ton of PM10 from a single source during the term of the permit and 3.0 tons of PM10 at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act or 25 Pa. Code Article III.

(5) One ton of VOCs from a single source during the term of the permit and 5.0 tons of VOCs at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act or 25 Pa. Code Article III.

(c) In accordance with § 127.14, the permittee may install the following minor sources without the need for a plan approval:

(1) Air conditioning or ventilation systems not designed to remove pollutants generated or released from other sources.

(2) Combustion units rated at 2,500,000 or less Btu per hour of heat input.

(3) Combustion units with a rated capacity of less than 10,000,000 Btu per hour heat input fueled by natural gas supplied by a public utility, liquefied petroleum gas or by commercial fuel oils which are No. 2 or lighter, viscosity less than or equal to 5.82 c St, and which meet the sulfur content requirements of 25 Pa. Code § 123.22 (relating to combustion units). For purposes of this permit, commercial fuel oil shall be virgin oil which has no reprocessed, recycled or waste material added.

(4) Space heaters which heat by direct heat transfer.





(5) Laboratory equipment used exclusively for chemical or physical analysis.

(6) Other sources and classes of sources determined to be of minor significance by the Department.

(d) This permit does not authorize de minimis emission increases if the emissions increase would cause one or more of the following:

(1) Increase the emissions of a pollutant regulated under Section 112 of the Clean Air Act except as authorized in Subparagraphs (b)(4) and (5) of this permit condition.

(2) Subject the facility to the prevention of significant deterioration requirements in 25 Pa. Code Chapter 127, Subchapter D and/or the new source review requirements in Subchapter E.

(3) Violate any applicable requirement of the Air Pollution Control Act, the Clean Air Act, or the regulations promulgated under either of the acts.

(4) Changes which are modifications under any provision of Title I of the Clean Air Act and emission increases which would exceed the allowable emissions level (expressed as a rate of emissions or in terms of total emissions) under the Title V permit.

(e) Unless precluded by the Clean Air Act or the regulations thereunder, the permit shield described in 25 Pa. Code § 127.516 (relating to permit shield) shall extend to the changes made under 25 Pa. Code § 127.449 (relating to de minimis emission increases).

(f) Emissions authorized under this permit condition shall be included in the monitoring, recordkeeping and reporting requirements of this permit.

(g) Except for de minimis emission increases allowed under this permit, 25 Pa. Code § 127.449, or sources and physical changes meeting the requirements of 25 Pa. Code § 127.14, the permittee is prohibited from making physical changes or engaging in activities that are not specifically authorized under this permit without first applying for a plan approval. In accordance with § 127.14(b), a plan approval is not required for the construction, modification, reactivation, or installation of the sources creating the de minimis emissions increase.

(h) The permittee may not meet de minimis emission threshold levels by offsetting emission increases or decreases at the same source.

#### #020 [25 Pa. Code §§ 127.11a & 127.215]

#### **Reactivation of Sources**

(a) The permittee may reactivate a source at the facility that has been out of operation or production for at least one year, but less than or equal to five (5) years, if the source is reactivated in accordance with the requirements of 25 Pa. Code § 127.11a and 127.215. The reactivated source will not be considered a new source.

(b) A source which has been out of operation or production for more than five (5) years but less than 10 years may be reactivated and will not be considered a new source if the permittee satisfies the conditions specified in 25 Pa. Code § 127.11a(b).

#### #021 [25 Pa. Code §§ 121.9 & 127.216]

#### Circumvention

(a) The owner of this Title V facility, or any other person, may not circumvent the new source review requirements of 25 Pa. Code Chapter 127, Subchapter E by causing or allowing a pattern of ownership or development, including the phasing, staging, delaying or engaging in incremental construction, over a geographic area of a facility which, except for the pattern of ownership or development, would otherwise require a permit or submission of a plan approval application.

(b) No person may permit the use of a device, stack height which exceeds good engineering practice stack height, dispersion technique or other technique which, without resulting in reduction of the total amount of air contaminants emitted, conceals or dilutes an emission of air contaminants which would otherwise be in violation of this permit, the Air Pollution Control Act or the regulations promulgated thereunder, except that with prior approval of the Department,





the device or technique may be used for control of malodors.

### #022 [25 Pa. Code §§ 127.402(d) & 127.513(1)]

#### **Submissions**

(a) Reports, test data, monitoring data, notifications and requests for renewal of the permit shall be submitted to the:

Regional Air Program Manager PA Department of Environmental Protection (At the address given on the permit transmittal letter, or otherwise notified)

(b) Any report or notification for the EPA Administrator or EPA Region III should be addressed to:

Office of Air Enforcement and Compliance Assistance (3AP20) United States Environmental Protection Agency Region 3 1650 Arch Street Philadelphia, PA 19103-2029

(c) An application, form, report or compliance certification submitted pursuant to this permit condition shall contain certification by a responsible official as to truth, accuracy, and completeness as required under 25 Pa. Code § 127.402(d). Unless otherwise required by the Clean Air Act or regulations adopted thereunder, this certification and any other certification required pursuant to this permit shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

#### #023 [25 Pa. Code §§ 127.441(c) & 127.463(e); Chapter 139; & 114(a)(3), 504(b) of the CAA]

#### Sampling, Testing and Monitoring Procedures

(a) The permittee shall perform the emissions monitoring and analysis procedures or test methods for applicable requirements of this Title V permit. In addition to the sampling, testing and monitoring procedures specified in this permit, the Permittee shall comply with any additional applicable requirements promulgated under the Clean Air Act after permit issuance regardless of whether the permit is revised.

(b) The sampling, testing and monitoring required under the applicable requirements of this permit, shall be conducted in accordance with the requirements of 25 Pa. Code Chapter 139 unless alternative methodology is required by the Clean Air Act (including §§ 114(a)(3) and 504(b)) and regulations adopted thereunder.

#### #024 [25 Pa. Code §§ 127.511 & Chapter 135]

#### **Recordkeeping Requirements**

(a) The permittee shall maintain and make available, upon request by the Department, records of required monitoring information that include the following:

- (1) The date, place (as defined in the permit) and time of sampling or measurements.
- (2) The dates the analyses were performed.
- (3) The company or entity that performed the analyses.
- (4) The analytical techniques or methods used.
- (5) The results of the analyses.
- (6) The operating conditions as existing at the time of sampling or measurement.

(b) The permittee shall retain records of the required monitoring data and supporting information for at least five (5) years from the date of the monitoring sample, measurement, report or application. Supporting information includes the calibration data and maintenance records and original strip-chart recordings for continuous monitoring instrumentation, and copies of reports required by the permit.





(c) The permittee shall maintain and make available to the Department upon request, records including computerized records that may be necessary to comply with the reporting, recordkeeping and emission statement requirements in 25 Pa. Code Chapter 135 (relating to reporting of sources). In accordance with 25 Pa. Code Chapter 135, § 135.5, such records may include records of production, fuel usage, maintenance of production or pollution control equipment or other information determined by the Department to be necessary for identification and quantification of potential and actual air contaminant emissions. If direct recordkeeping is not possible or practical, sufficient records shall be kept to provide the needed information by indirect means.

### #025 [25 Pa. Code §§ 127.411(d), 127.442, 127.463(e) & 127.511(c)]

#### **Reporting Requirements**

(a) The permittee shall comply with the reporting requirements for the applicable requirements specified in this Title V permit. In addition to the reporting requirements specified herein, the permittee shall comply with any additional applicable reporting requirements promulgated under the Clean Air Act after permit issuance regardless of whether the permit is revised.

(b) Pursuant to 25 Pa. Code § 127.511(c), the permittee shall submit reports of required monitoring at least every six (6) months unless otherwise specified in this permit. Instances of deviations (as defined in 25 Pa. Code § 121.1) from permit requirements shall be clearly identified in the reports. The reporting of deviations shall include the probable cause of the deviations and corrective actions or preventative measures taken, except that sources with continuous emission monitoring systems shall report according to the protocol established and approved by the Department for the source. The required reports shall be certified by a responsible official.

(c) Every report submitted to the Department under this permit condition shall comply with the submission procedures specified in Section B, Condition #022(c) of this permit.

(d) Any records, reports or information obtained by the Department or referred to in a public hearing shall be made available to the public by the Department except for such records, reports or information for which the permittee has shown cause that the documents should be considered confidential and protected from disclosure to the public under Section 4013.2 of the Air Pollution Control Act and consistent with Sections 112(d) and 114(c) of the Clean Air Act and 25 Pa. Code § 127.411(d). The permittee may not request a claim of confidentiality for any emissions data generated for the Title V facility.

### #026 [25 Pa. Code § 127.513]

#### **Compliance Certification**

(a) One year after the date of issuance of the Title V permit, and each year thereafter, unless specified elsewhere in the permit, the permittee shall submit to the Department and EPA Region III a certificate of compliance with the terms and conditions in this permit, for the previous year, including the emission limitations, standards or work practices. This certification shall include:

(1) The identification of each term or condition of the permit that is the basis of the certification.

(2) The compliance status.

(3) The methods used for determining the compliance status of the source, currently and over the reporting period.

(4) Whether compliance was continuous or intermittent.

(b) The compliance certification shall be postmarked or hand-delivered no later than thirty days after each anniversary of the date of issuance of this Title V Operating Permit, or on the submittal date specified elsewhere in the permit, to the Department and EPA in accordance with the submission requirements specified in condition #022 of this section.

#### #027 [25 Pa. Code § 127.3]

#### **Operational Flexibility**

The permittee is authorized to make changes within the Title V facility in accordance with the following provisions in 25 Pa. Code Chapter 127 which implement the operational flexibility requirements of Section 502(b)(10) of the Clean Air Act and Section 6.1(i) of the Air Pollution Control Act:

(1) Section 127.14 (relating to exemptions)





- (2) Section 127.447 (relating to alternative operating scenarios)
- (3) Section 127.448 (relating to emissions trading at facilities with federally enforceable emissions caps)
- (4) Section 127.449 (relating to de minimis emission increases)
- (5) Section 127.450 (relating to administrative operating permit amendments)
- (6) Section 127.462 (relating to minor operating permit amendments)

(7) Subchapter H (relating to general plan approvals and operating permits)

### #028 [25 Pa. Code §§ 127.441(d), 127.512(i) and 40 CFR Part 68]

#### **Risk Management**

(a) If required by Section 112(r) of the Clean Air Act, the permittee shall develop and implement an accidental release program consistent with requirements of the Clean Air Act, 40 CFR Part 68 (relating to chemical accident prevention provisions) and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act (P.L. 106-40).

(b) The permittee shall prepare and implement a Risk Management Plan (RMP) which meets the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68 and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act when a regulated substance listed in 40 CFR § 68.130 is present in a process in more than the listed threshold quantity at the Title V facility. The permittee shall submit the RMP to the federal Environmental Protection Agency according to the following schedule and requirements:

(1) The permittee shall submit the first RMP to a central point specified by EPA no later than the latest of the following:

(i) Three years after the date on which a regulated substance is first listed under § 68.130; or,

(ii) The date on which a regulated substance is first present above a threshold quantity in a process.

(2) The permittee shall submit any additional relevant information requested by the Department or EPA concerning the RMP and shall make subsequent submissions of RMPs in accordance with 40 CFR § 68.190.

(3) The permittee shall certify that the RMP is accurate and complete in accordance with the requirements of 40 CFR Part 68, including a checklist addressing the required elements of a complete RMP.

(c) As used in this permit condition, the term "process" shall be as defined in 40 CFR § 68.3. The term "process" means any activity involving a regulated substance including any use, storage, manufacturing, handling, or on-site movement of such substances or any combination of these activities. For purposes of this definition, any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, shall be considered a single process.

(d) If the Title V facility is subject to 40 CFR Part 68, as part of the certification required under this permit, the permittee shall:

(1) Submit a compliance schedule for satisfying the requirements of 40 CFR Part 68 by the date specified in 40 CFR § 68.10(a); or,

(2) Certify that the Title V facility is in compliance with all requirements of 40 CFR Part 68 including the registration and submission of the RMP.

(e) If the Title V facility is subject to 40 CFR Part 68, the permittee shall maintain records supporting the implementation of an accidental release program for five (5) years in accordance with 40 CFR § 68.200.

(f) When the Title V facility is subject to the accidental release program requirements of Section 112(r) of the Clean Air Act and 40 CFR Part 68, appropriate enforcement action will be taken by the Department if:

(1) The permittee fails to register and submit the RMP or a revised plan pursuant to 40 CFR Part 68.





(2) The permittee fails to submit a compliance schedule or include a statement in the compliance certification required under Condition #26 of Section B of this Title V permit that the Title V facility is in compliance with the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68, and 25 Pa. Code § 127.512(i).
[25 Pa. Code § 127.512(e)]
d Economic Incentives and Emission Trading Programs
No permit revision shall be required under approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this Title V permit.
[25 Pa. Code §§ 127.516, 127.450(d), 127.449(f) & 127.462(g)]
Shield
(a) The permittee's compliance with the conditions of this permit shall be deemed in compliance with applicable requirements (as defined in 25 Pa. Code § 121.1) as of the date of permit issuance if either of the following applies:
(1) The applicable requirements are included and are specifically identified in this permit.
(2) The Department specifically identifies in the permit other requirements that are not applicable to the permitted facility or source.
(b) Nothing in 25 Pa. Code § 127.516 or the Title V permit shall alter or affect the following:
(1) The provisions of Section 303 of the Clean Air Act, including the authority of the Administrator of the EPA provided thereunder.
(2) The liability of the permittee for a violation of an applicable requirement prior to the time of permit issuance.
(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act.
(4) The ability of the EPA to obtain information from the permittee under Section 114 of the Clean Air Act.
(c) Unless precluded by the Clean Air Act or regulations thereunder, final action by the Department incorporating a significant permit modification in this Title V Permit shall be covered by the permit shield at the time that the permit containing the significant modification is issued.
[25 Pa. Code §135.3]
lg
(a) The permittee shall submit by March 1 of each year an annual emissions report for the preceding calendar year. The report shall include information for all active previously reported sources, new sources which were first operated during the preceding calendar year, and sources modified during the same period which were not previously reported. All air emissions from the facility should be estimated and reported.
(b) A source owner or operator may request an extension of time from the Department for the filing of an annual emissions report, and the Department may grant the extension for reasonable cause.
[25 Pa. Code §135.4]
Format
Emissions reports shall contain sufficient information to enable the Department to complete its emission inventory. Emissions reports shall be made by the source owner or operator in a format specified by the Department.





# I. RESTRICTIONS.

# Emission Restriction(s).

#### # 001 [25 Pa. Code §121.7] Prohibition of air pollution.

No person may permit air pollution as that term is defined in the Air Pollution Control Act (35 P.S. Section 4003).

# # 002 [25 Pa. Code §123.1]

# Prohibition of certain fugitive emissions

No person may permit the emission into the outdoor atmosphere of fugitive air contaminant from a source other than the following:

- (a) construction or demolition of buildings or structures;
- (b) grading, paving and maintenance of roads and streets;

(c) use of roads and streets. Emissions from material in or on trucks, railroad cars and other vehicular equipment are not considered as emissions from use of roads and streets;

- (d) clearing of land;
- (e) stockpiling of materials;
- (f) open burning operations, as specified in 25 Pa. Code § 129.14;

(g) blasting in open pit mines. Emissions from drilling are not considered as emissions from blasting;

(h) coke oven batteries, provided the fugitive air contaminants emitted from any coke oven battery comply with the standards for visible fugitive emissions in 25 Pa. Code §§ 123.44 and 129.15 (relating to limitations of visible fugitive air contaminants from operation of any coke oven battery; and coke pushing operations); and

(i) sources and classes of sources other than those identified in (a)-(h), above, for which the permittee has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:

(1) the emissions are of minor significance with respect to causing air pollution; and

(2) the emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.

### # 003 [25 Pa. Code §123.2]

### Fugitive particulate matter

A person may not permit fugitive particulate matter to be emitted into the outdoor atmosphere from a source specified in 25 Pa. Code § 123.1 (a) (1)-(9) (relating to prohibition of certain fugitive emissions) if such emissions are visible at the point the emissions pass outside the person's property.

### # 004 [25 Pa. Code §123.31]

### Limitations

A person may not permit the emission into the outdoor atmosphere of any malodorous air contaminants from any source in such manner that the malodors are detectable outside the property of the person on whose land the source is being operated.

### # 005 [25 Pa. Code §123.41]

### Limitations

A person may not permit the emission into the outdoor atmosphere of visible air contaminants in such a manner that the opacity of the emission is either of the following:

(a) equal to or greater than 20% for a period or periods aggregating more than three minutes in any 1 hour; or





(b) equal to or greater than 60% at any time.

#### # 006 [25 Pa. Code §123.42] Exceptions

The opacity limitations as per 25 Pa. Code § 123.41 shall not apply to a visible emission in either of the following instances:

(a) when the presence of uncombined water is the only reason for failure to meet the limitations;

(b) When the emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.

(c) When the emission results from the sources specified in 25 Pa. Code § 123.1(a)(1)-(9) (relating to prohibition of certain fugitive emissions).

#### # 007 [25 Pa. Code §127.441] Operating permit terms and conditions.

Total particulate matter emissions, including both point source and fugitive emissions, from the Fairless Landfill, the GROWS Landfill (TVOP 09-0007) and the GROWS North Landfill (Plan Approval 09-0007C) shall be limited as follows:

PM10 – less than 100 tons per year on a 12-month rolling basis PM2.5 – less than 100 tons per year on a 12-month rolling basis

Emissions shall be calculated in accordance with the methods and emission factors used in the application for plan approval for the Fairless landfill (09-0210A), unless otherwise approved by the Department in writing.

Note: The Department reserves the right to require the permittee to use a different method in this calculation. In the event that use of such different calculation method, or in the event that the relevant emission factors published in the most recent compilation of AP-42, would result in a calculated increase in PM10 and PM2.5 emissions from the entire landfill, the Department may require the permittee to submit an appropriate application to incorporate the changes in calculated PM10 and PM2.5 emissions.

#### # 008 [25 Pa. Code §129.14] Open burning operations

The permittee may not permit the open burning of material in the Southeast Air Basin, except when the open burning results from:

(a) A fire set to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a public officer.

(b) Any fire set for the purpose of instructing personnel in fire fighting, when approved by the Department.

(c) A fire set for the prevention and control of disease or pests, when approved by the Department.

(d) A fire set in conjunction with the production of agricultural commodities in their unmanufactured state on the premises of the farm operation.

(e) A fire set for the purpose of burning domestic refuse, when the fire is on the premises of a structure occupied solely as a dwelling by two families or less and when the refuse results from the normal occupancy of the structure.





(f) A fire set solely for recreational or ceremonial purposes.

(g) A fire set solely for cooking food.

#### II. TESTING REQUIREMENTS.

#### # 009 [25 Pa. Code §127.441] Operating permit terms and conditions.

(a) If at any time the Department has cause to believe that air contaminant emissions from any source(s) may be in excess of the limitations specified in this Permit, or established pursuant to, any applicable rule or regulation contained in 25 Pa. Code Article III, the permittee shall be required to conduct whatever tests are deemed necessary by the Department to determine the actual emission rate(s).

(b) Such testing shall be conducted in accordance with the provisions of 25 Pa. Code Chapter 139 and the most current version of the DEP Source Testing Manual, when applicable, and in accordance with any restrictions or limitations established by the Department at such time as it notifies the permittee that testing is required.

#### III. MONITORING REQUIREMENTS.

# # 010 [25 Pa. Code §123.43]

#### **Measuring techniques**

Visible emissions may be measured using either of the following:

(a) a device approved by the Department and maintained to provide accurate opacity measurements; or

(b) observers, trained and qualified to measure plume opacity with the naked eye or with the aid of any devices approved by the Department

#### # 011 [25 Pa. Code §127.441] Operating permit terms and conditions.

(a) The permittee shall calculate emissions of the following pollutants from each of the 3 landfills (Fairless, GROWS (TVOP 09-00007), and GROWS North (Plan Approval 09-0007C)) on a monthly and on a 12-month rolling basis: PM10

PM2.5

Emissions shall be calculated in accordance with the methods and emission factors used in the application for plan approval for the Fairless landfill (09-0210A), unless otherwise approved by the Department in writing.

(b) The permittee shall calculate the sum of the emissions of the following pollutants from the three landfills (Fairless, GROWS and GROWS North) on a monthly and on a 12-month rolling basis: PM10 PM2.5

### # 012 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

(a) The permittee shall monitor the facility, once per operating day, for the following:

(1) Odors which may be objectionable (as per 25 Pa. Code §123.31).

(2) Visible Emissions (as per 25 Pa. Code §§123.41 and 123.42).





(3) Fugitive Particulate Matter (as per 25 Pa. Code §§ 123.1 and 123.2).

(b) Objectionable odors, which may cause annoyance or discomfort to the public noticed at the site property boundaries that are caused or may be caused by operations at the site, as well as fugitive particulate emissions that originated on-site and cross the property line, and visible emissions that originated on site shall:

- (1) Be investigated.
- (2) Be reported to the Environmental Department, or individual(s) designated by the permittee.
- (3) Have appropriate corrective action taken (for emissions that originate on-site).
- (4) Be recorded in a permanent written log.

### IV. RECORDKEEPING REQUIREMENTS.

### # 013 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The permittee shall maintain records of all the facility's increases of emissions from the following categories:

- (a) emissions increase of minor significance without notification to the Department.
- (b) de minimis increases with notification to the Department, via letter.
- (c) increases resulting from a Request for Determination (RFD) to the Department.
- (d) increases resulting from the issuance of a plan approval and subsequent operating permit.

### # 014 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

(a) The permittee shall keep records of the emissions of the following pollutants from each of the 3 landfills (Fairless, GROWS (TVOP 09-00007), and GROWS North (Plan Approval 09-0007C)) on a monthly and on a 12-month rolling basis: PM10

PM2.5

Emissions shall be calculated in accordance with the methods and emission factors used in the application for plan approval for the Fairless landfill (09-0210A), unless otherwise approved by the Department in writing.

(b) The permittee shall keep records of the sum of the emissions of the following pollutants from the three landfills (Fairless, GROWS, and GROWS North) on a monthly and on a 12-month rolling basis:
 PM10
 PM2.5

# # 015 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The permittee shall maintain a record of all monitoring of fugitive emissions, visible emissions and odors, including those that deviate from the conditions found in this permit. The record of deviations shall contain, at a minimum, the following items:

- (a) date, time, and location of the incident(s);
- (b) the cause of the event; and
- (c) the corrective action taken, if necessary, to abate the situation and prevent future occurrences.





#### V. REPORTING REQUIREMENTS.

#### # 016 [25 Pa. Code §127.441] Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511(c).]

The permittee shall submit the following:

(a) An annual certification of compliance, due by April 1st of each year, for the period covering January 1 through December 31 of the previous year. This certification of compliance shall document compliance with all permit terms and conditions set forth in this Title V permit as required under condition #26 of section B of this permit. The annual certification of compliance shall be submitted to the Department in paper form, and EPA Region III in electronic form at the following email address: R3\_APD\_Permits@epa.gov

(b) A semi-annual deviation report, due by October 1, of each year, for the period covering January 1 through June 30 of the same year. Note: The annual certification of compliance fulfills the obligation for the second deviation reporting period (July 1 through December 31 of the previous year).

#### # 017 [25 Pa. Code §127.441] Operating permit terms and conditions.

Reports, test data, monitoring data, and notifications to the Administrator shall be submitted both to the:

(a)
 Regional Air Program Manager
 PA Department of Environmental Protection
 (At the address given on the permit transmittal letter, or otherwise notified)

and (b) Office of Air Enforcement and Compliance Assistance (3AP20) United States Environmental Protection Agency

Region 3 1650 Arch Street Philadelphia, PA 19103-2029

The above addresses apply if the appropriate electronic report is not available in CEDRI (https://www3.epa.gov/ttn/chief/cedri/index.html) at the time the report is due or if performance test data collected that need to be reported use test methods that are not supported by EPA's ERT as listed on the EPA's ERT website (https://www3.epa.gov/ttn/chief/ert/ert\_info.html) at the time of the test.

#### # 018 [25 Pa. Code §127.441] Operating permit terms and conditions.

(a) The permittee shall report malfunctions, emergencies or incidents of excess emissions to the Department. A malfunction is any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. An emergency is any situation arising from sudden and reasonably unforeseeable events beyond the control of the owner or operator of a facility which requires immediate corrective action to restore normal operation and which causes the emission source to exceed emissions, due to unavoidable increases in emissions attributable to the situation. An emergency shall not include situations caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.

(b) When the malfunction, emergency or incident of excess emissions poses an imminent danger to the public health, safety, welfare, or environment, it shall be reported to the Department and the County Emergency Management Agency by telephone within one (1) hour after the discovery of the malfunction, emergency or incident of excess emissions. The owner or operator shall submit a written or emailed report of instances of such malfunctions, emergencies or incidents of excess emissions to the Department within three (3) business days of the telephone report.





- (c) The report shall describe the following:
- (1) Name, permit or authorization number, and location of the facility;
- (2) Nature and cause of the malfunction, emergency or incident;
- (3) Date and time when the malfunction, emergency or incident was first observed;
- (4) Expected duration of excess emissions;
- (5) Estimated rate of emissions; and
- (6) Corrective actions or preventative measures taken.

(d) Any malfunction, emergency or incident of excess emissions that is not subject to the notice requirements of paragraph (b) of this condition shall be reported to the Department by telephone within 24 hours (or by 4:00 PM of the next business day, whichever is later) of discovery and in writing or by e-mail within five (5) business days of discovery. The report shall contain the same information required by paragraph (c), and any permit specific malfunction reporting requirements.

(e) During an emergency an owner or operator may continue to operate the source at their discretion provided they submit justification for continued operation of a source during the emergency and follow all the notification and reporting requirements in accordance with paragraphs (b)-(d), as applicable, including any permit specific malfunction reporting requirements.

(f) Reports regarding malfunctions, emergencies or incidents of excess emissions shall be submitted to the appropriate DEP Regional Office Air Program Manager.

(g) Any emissions resulted from malfunction or emergency are to be reported in the annual emissions inventory report, if the annual emissions inventory report is required by permit or authorization.

#### VI. WORK PRACTICE REQUIREMENTS.

### # 019 [25 Pa. Code §123.1]

#### Prohibition of certain fugitive emissions

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512.]

The permittee shall ensure that the source(s) and air pollution control device(s), listed in Section A and Section G, where applicable, of this permit, are operated and maintained in a manner consistent with good operating and maintenance practices, and in accordance with manufacturer's specifications.

#### # 020 [25 Pa. Code §123.1] Prohibition of certain fugitive emissions

The permittee shall immediately, upon discovery, implement measures, which may include the application for the installation of an air cleaning device(s), if necessary, to reduce the air contaminant emissions to within applicable limitations, if at any time the operation of the source(s) identified in Section A of this permit, is causing the emission of air contaminants in excess of the limitations specified in, or established pursuant to, 25 Pa. Code Article III, or any other applicable rule promulgated under the Clean Air Act.

### # 021 [25 Pa. Code §123.1]

### Prohibition of certain fugitive emissions

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512.]

The permittee may not modify any air contaminant system identified in this permit, prior to obtaining Department approval, except those modifications authorized by Condition #019(g).

### # 022 [25 Pa. Code §123.1] Prohibition of certain fugitive emissions





09-00210

[Additional Authority for this permit condition is also derived from 25 Pa. Code Sections 123.1(c) and 127.441.]

A person responsible for any source specified in 25 Pa. Code Section 123.1 (Condition #002), shall take all reasonable actions to prevent particulate matter from becoming airborne. These actions shall include, but not be limited to, the following:

(a) Use, where possible, of water or suitable chemicals, for control of dust in the demolition of buildings or structures, construction operations, the grading of roads, or the clearing of land.

(b) Application of asphalt, water, or other suitable chemicals, as approved by the Department, on dirt roads, material stockpiles and other surfaces which may give rise to airborne dusts.

A logbook shall be maintained to demonstrate compliance with this condition.

(c) Paving and maintenance of roadways.

(d) Prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or by other means.

#### # 023 [25 Pa. Code §127.441] Operating permit terms and conditions.

Nothing in this permit shall be construed to preclude the permittee from proposing, in accordance with 40 CFR Section 60.767(c)(2), and upon written Department approval implementing any regulatory permitted alternatives. The gas collection and control system design plan shall include any alternatives to the operational standards, test methods, procedures, compliance measures, montoring, recordkeeping or reporting provisions of 40 CFR Sections 60.763 through 60.758, (found under Section D) as restated or incorporated herein.

#### VII. ADDITIONAL REQUIREMENTS.

#### # 024 [25 Pa. Code §127.441] Operating permit terms and conditions.

(a) The aggregate of all pollutant emissions from both the Fairless Landfill (Title V Operating Permit No. 09-00210), (Tax ID-Plant Code 26-3468180-1) and the GROWS (Title V Operating Permit No. 09-00007) and GROWS North Landfills (Plan Approval 09-0007C), (Tax ID - Plant Code 23-1655318-4) shall be considered in the Department's and EPA's determinations of applicability for air programs including, but not limited to, the following:

- (1) Prevention of Significant Deterioration (PSD).
- (2) Non-attainment New Source Review (NNSR).
- (3) Maximum Achievable Control Technology (MACT) standards.
- (4) Accidental release prevention program requirements.

(b) Any increase in emissions from pollutant-emitting activities at either facility shall be combined and aggregated to determine whether an applicable requirement is triggered at the site.

(c) It is the Department's determination, with this Operating Permit, that the Fairless landfill constitutes a separate facility from GROWS and GROWS North for purposes of determining applicability of the Standards of Performance for Municipal Solid Waste Landfills, 40 CFR Part 60, Subpart XXX and the National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills, 40 CFR Part 63, Subpart AAAA.

#### # 025 [25 Pa. Code §127.441] Operating permit terms and conditions.

The Landfill is subject to the provisions of 40 CFR Part 60 Subpart XXX of the Standards of Performance for New Stationary Sources (NSPS), 40 CFR Part 61 Subpart M of the National Emission Standard for Asbestos and 40 CFR Part 63 Subpart AAAA of the National Emission Standards for Hazardous Air Pollutants (NESHAPs).





#### VIII. COMPLIANCE CERTIFICATION.

No additional compliance certifications exist except as provided in other sections of this permit including Section B (relating to Title V General Requirements).

#### IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.

\*\*\* Permit Shield In Effect \*\*\*

09-00210

WASTE MGMT OF FAIRLESS/FAIRLESS LDFL



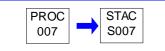
# SECTION D. Source Level Requirements

Source ID: 007

Source Name: SEQUENTIAL BATCH REACTOR (TK-5)

Source Capacity/Throughput: 12,500.000 Gal/HR LEACHATE

Conditions for this source occur in the following groups: SBR GROUP



#### I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# \*\*\* Permit Shield in Effect. \*\*\*

09-00210

WASTE MGMT OF FAIRLESS/FAIRLESS LDFL



# SECTION D. Source Level Requirements

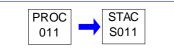
Source ID: 011

Source Name: SEQUENTIAL BATCH REACTOR (TK-6)

Source Capacity/Throughput: 12,500.000 Gal/HR LEACH

LEACHATE

Conditions for this source occur in the following groups: SBR GROUP



### I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# \*\*\* Permit Shield in Effect. \*\*\*

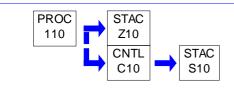




Source ID: 110

Source Name: MSW LANDFILL - FAIRLESS

Source Capacity/Throughput:



### I. RESTRICTIONS.

### **Emission Restriction(s).**

#### # 001 [25 Pa. Code §127.441] Operating permit terms and conditions.

Fugitive emissions of Volatile Organic Compounds (VOC) from the Fairless Landfill shall not exceed 22.61 tons per year, calculated after closure in accordance with the definitions of "closed landfill" and "closure" in 40 CFR Section 60.761, measured as hexane. (Point sources are not included in this total.)

# 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code Sections 127.12(a)(5), and 40 CFR Sections 60.762(b)(2)(ii); 60.762(b)(1)(ii)(A), 60.762(b)(2)(ii)(C)(1-4), 60.763(a); 60.767(c)(1) - (3) and (6); 60.767(d)]

1) The permittee shall submit a revised gas collection and control plan for the Fairless Landfill prior to any installation or expansion of the permanent gas collection and control system in a way that was not previously described by the initial gas collection and control plan (submitted February 14, 2017) or any subsequent revisions. The plan shall be prepared by a professional engineer in the manner expressed in paragraphs (A) through (C).

Pursuant to 40 CFR Section 60.767(d)(1), a revised GCCS plan must be submitted 90 days in advance of any expansions into areas not approved by the previous GCCS plan.

Note: A Plan Approval or approved Request for Determination may first be required.

(A) The collection and control system as described in the plan shall meet the design requirements of paragraph 40 CFR Section 60.762(b)(2)(ii)(C)(1) - (4) as described in (a) through (d)below.

(a) Handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control or treatment system equipment;

(b) Collect gas from each area, cell, or group of cells in the landfill in which the initial solid waste has been placed for a period of 5 years or more if active or 2 or more years if closed or at final grade.

(c) Collect gas at a sufficient extraction rate; and

(d) Minimize off-site migration of subsurface gas.

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

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

(D) The Department shall review the information submitted under paragraphs (A), (B), and (C) above and either





approve it, disapprove it, or request that additional information be submitted. Because of the many site-specific factors involved with landfill gas system design, alternative systems may be necessary. A wide variety of system designs are possible, such as vertical wells, combination horizontal and vertical collection systems, or horizontal trenches only, leachate collection components, and passive systems.

Pursuant to 40 CFR Section 60.767(c)(6), if the Administrator does not approve or disapprove the design plan or request additional information within 90 days of receipt, then the permittee may continue with the implementation of the design plan, recognizing that they are proceeding at their own risk.

(2) The permittee shall install, operate and maintain the collection and control system, as designed and approved, to capture the gas generated within the landfill, in accordance with the landfill's gas collection and control system ("GCCS") plan.

(3) The collection efficiency of the gas management system for the final design of the Fairless Landfill at closure shall be not less than 92%.

#### # 003 [25 Pa. Code §127.441] Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 40 CFR Sections 60.763(c); 60.765(a)(5); 60.767(g); 60.768(e)(3), (4) and (5).]

(a) The permittee shall operate the collection system such that each interior wellhead in the collection system has a landfill gas temperature less than 55°C (131 °F). However, the permittee may establish a higher operating temperature at a particular well. A higher operating value demonstration shall be submitted to the Administrator for approval and must include supporting data demonstrating that the elevated parameter neither causes fires nor significantly inhibits anaerobic decomposition by killing methanogens. The demonstration must satisfy both criteria in order to be approved (i.e. neither causing fires nor killing methanogens is acceptable.).

(b) If monitoring performed pursuant to Condition #013 [40 CFR Section 60.765(a)(5)] demonstrates that a well exceeds the temperature standard set forth in paragraph (a) of this condition, action shall be initiated to correct the exceedance within 5 calendar days, in accordance with 40 CFR Section 60.765(a)(5), as stated below. Any attempted corrective measure shall not cause exceedances of other operational or performance standards.

(i) If a landfill gas temperature less than 55 degrees Celsius (131 degrees Fahrenheit) cannot be achieved within 15 calendar days of the first measurement of landfill gas temperature greater than 55 degrees Celsius (131 degrees Fahrenheit), the owner or operator must conduct a root cause analysis and correct the exceedance as soon as practicable, but no later than 60 days after a landfill gas temperature greater than 55 degrees Celsius (131 degrees Fahrenheit) was first measured. The owner or operator must keep records according to 40 CFR §60.768(e)(3) [Condition #015(f)].

(ii) If corrective actions cannot be fully implemented within 60 days following the temperature measurement for which the root cause analysis was required, the owner or operator must also conduct a corrective action analysis and develop an implementation schedule to complete the corrective action(s) as soon as practicable, but no more than 120 days following the measurement of landfill gas temperature greater than 55 degrees Celsius (131 degrees Fahrenheit). The owner or operator must submit the items listed in §60.767(g)(7)[Condition #021(g)] as part of the next annual report. The owner or operator must keep records according to 40 CFR §60.768(e)(4) [Condition #015(f)(ii)].

(iii) If corrective action is expected to take longer than 120 days to complete after the initial exceedance, the owner or operator must submit the root cause analysis, corrective action analysis, and corresponding implementation timeline to the Administrator, according to §60.767(g)(7) and §60.767(j). The owner or operator must keep records according to §60.768(e)(5) [Condition #015(f)(iii)].

(c) If corrective actions are taken pursuant to paragraph (b) of this condition [40 CFR Section 60.765], the monitored exceedance is not a violation of the operational requirements in 40 CFR Section 60.763 or paragraph (a) of this condition.





#### # 004 [25 Pa. Code §127.441] Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 40 CFR Sections 60.763(d); 60.765(c) and (d).]

(a) The permittee shall operate the collection system such that the methane concentration at the surface of the landfill is less than 500 parts per million above background at the surface of the landfill.

(b) To determine if this level is exceeded, the permitte shall conduct monitoring pursuant to Condition #012 [40 CFR Sections 60.763(d) and 60.765(c) and (d)].

(c) Any reading of 500 parts per million or more above background at any location shall be recorded as a monitored exceedance and the actions specified in paragraphs 40 CFR Section 60.765(c)(4) (i) through (v) or listed below shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of 40 CFR Section 60.763(d) or paragraph (a) above.

(i) The location of each monitored exceedance shall be marked and the location and concentration recorded.

(ii) Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each exceedance shall be made and the location shall be re-monitored within 10 calendar days of detecting the exceedance.

(iii) If the re-monitoring of the location shows a second exceedance, additional corrective action shall be taken and the location shall be monitored again within 10 days of the second exceedance. If the re-monitoring shows a third exceedance for the same location, the action specified in paragraph 40 CFR Section 60.755 (c)(4)(v) (Condition #004(v) shall be taken, and no further monitoring of that location is required until the action specified in paragraph 40 CFR Section 60.755 (c)(4)(v) (Condition #004(v) shall be taken, and no further monitoring of that location is required until the action specified in paragraph 40 CFR Section 60.755 (c)(4)(v) (Condition #004(v) shall be taken, and no further monitoring of that location is required until the action specified in paragraph 40 CFR Section 60.755 (c)(4)(v) (Condition #004(c) (v)) has been taken.

(iv) Any location that initially showed an exceedance but has a methane concentration less than 500 ppm methane above background at the 10-day re-monitoring specified in paragraph 40 CFR Section 60.755 (c)(4) (ii) or (iii) (Condition #004((c)(ii) or (iii)) shall be re-monitored 1 month from the initial exceedance. If the 1-month remonitoring shows a concentration less than 500 parts per million above background, no further monitoring of that location is required until the next quarterly monitoring period. If the 1-month remonitoring shows an exceedance, the actions specified in paragraph 40 CFR Section 60.755 (c)(4) (iii) or (v) (Condition #004(c)(iii) or (v)) shall be taken.

(v) For any location where monitored methane concentration equals or exceeds 500 parts per million above background three times within a quarterly period, a new well or other collection device shall be installed within 120 calendar days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes or control device, and a corresponding timeline for installation may be submitted to the Administrator for approval.

#### # 005 [25 Pa. Code §127.441] Operating permit terms and conditions.

Additional authority for this permit condition is also derived from 40 CFR Sections 60.763(b); 60.763(b)(1-3); 60.765(a)(5)(ii), 60.765(a)(3), 60.766(a)(1), 60.767(g)(7), 60.768(e)(4).]

(a) The gas collection system shall be operated with negative pressure at each wellhead, except under the following conditions.

(i) When a fire or increased well temperature is detected. The permittee shall record instances when positive pressure occurs in efforts to avoid fire.

(ii) When a geomembrane or synthetic cover is used. The permittee shall develop acceptable pressure limits in the design plan

(iii) When a well is decommissioned. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes shall be approved by the Administrator, as specified in 40 CFR Section 60.767(c).





(iv) When the collection or control systems are experiencing down times due to routine equipment maintenance including gas collection header repairs, wellhead and valve repairs, replacement or modifications, and other similar activities.

(b) If the monitoring performed pursuant to Condition #011 [40 CFR Section 60.766(a)(1)] demonstrates that a positive pressure exists and none of the exceptions provided by paragraph a(i)-(iv), above, applies, action shall be initiated to correct the exceedance within five calendar days. Any attempted corrective measure shall not cause exceedances of other operational or performance standards.

(i) In accordance with 40 CFR Section 60.765(a)(3)(i), if a negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement of positive pressure, the owner or operator must conduct a root cause analysis and correct the exceedance as soon as practicable, but no later than 60 days after positive pressure was first measured. The owner or operator must keep records according to 40 CFR Section 60.768(e)(3)[Condition #015 (f)(i)].

(ii) In accordance with 40 CFR Section 60.765(a)(3)(ii), if corrective actions cannot be fully implemented within 60 days following the positive pressure measurement for which the root cause analysis was required, the owner or operator must also conduct a corrective action analysis and develop an implementation schedule to complete the corrective action(s) as soon as practicable, but no more than 120 days following the positive pressure measurement. The owner or operator must submit the items listed in §60.767(g)(7) [Condition #021(g)] as part of the next annual report. The owner or operator must keep records according to §60.768(e)(4) [Condition #015(f)(ii)].

(iii) In accordance with 40 CFR Section 60.765(a)(3)(iii), if corrective action is expected to take longer than 120 days to complete after the initial exceedance, the owner or operator must submit the root cause analysis, corrective action analysis, and corresponding implementation timeline to the Administrator, according to 40 CFR Sections 60.767(g)(7) [Condition #021(g)] and 60.767(j)[Condition #024]. The owner or operator must keep records according to §60.768(e)(5) [Condition #015(f)(iii)].

(c) If corrective actions are taken pursuant to paragraph (b) of this condition [40 CFR Section 60.765(a)(3)], the monitored exceedance is not a violation of the operational requirements in 40 CFR Section 60.763 or paragraph (a) of this condition.

### Throughput Restriction(s).

#### # 006 [25 Pa. Code §127.441] Operating permit terms and conditions.

The maximum amount of solid waste disposal at the Fairless Landfill shall be limited to 18,333 tons per day of municipal solid as a quarterly average over the calendar year.

The Fairless Landfill shall be limited to a maximum disposal volume of 47.4 million bank cubic yards or other amount in compliance with the Solid Waste Permit and approved by the Department. Waste disposal at the Fairless Landfill shall be limited to a maximum of 27.9 million tons of MSW excluding municipal incinerator ash, asbestos waste and inert construction and demolition materials. The permittee shall not dispose of MSW in excess of this tonnage without obtaining approval from the Department.

#### Control Device Efficiency Restriction(s).

#### # 007 [25 Pa. Code §127.441] Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 25 Pa. Code Section 127.12(a)(5)]

(a) The permittee shall install an interim landfill gas collection system, as submitted to the Department with Plan Approval 09-0210A or as stated in the GCCS Plan (November 2018 or subsequent revisions made in accordance with 40 CFR Section 60.767(d)), for the Fairless Landfill. The interim gas collection system may include components of the leachate collection system, such as the leachate cell floor piping system, leachate cleanout risers and leachate stone media. Landfill gas collection wells, identified in the GCCS plan may be installed in interim phases of landfilling and the well casings extended upwards as landfilling progresses.





The permittee may use other temporary measures such as horizontal collectors, temporary vertical gas wells and slip wells. The slip well feature may be utilized from the bottom up of a well or to extend conventionally drilled wells vertically, through the upward progression of interim landfill grade developmet.

This interim gas collection system shall effectively capture the landfill gas generated within the landfill expansion within 24 months from the start of the placement of waste in a particular cell. The landfill gas collected during the interim period shall be treated and delivered to a third party through a pipeline or managed in accordance with Condition #008 of this section.

(b) The interim landfill gas collection system shall collect gas from each area, cell, or group of cells in the landfill in which the initial waste in the Fairless Landfill has been placed for a period of up to 24 months.

(c) The landfill gas collection system shall meet the requirements of 40 CFR Part 60, Subpart XXX no later than 5 years after initial solid waste placement in the Fairless Landfill. The final gas collection system design is not required to incorporate components of the interim gas collection system unless otherwise required under 40 CFR Part 60 Subpart XXX.

(d) Both interim and permanent landfill gas collection systems shall include the gas collection system, cell or group of cells and shall be sized such that it can handle the maximum expected gas flow rate from the entire Fairless Landfill.

(e) Both interim and permanent landfill gas collection systems shall be designed to minimize off-site migration of the landfill gas.

(f) The final landfill gas management system shall have a minimum collection efficiency of 92% at closure.

#### # 008 [25 Pa. Code §127.441] Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 25 Pa. Code Sections 127.12(a)(5), and 40 CFR Sections 60.762(b)(2)(iii); 60.762(b)(2)(iii)(A-C); 60.763(e) & (f).]

(a) The permittee shall route all the collected landfill gas to treatment or control systems that comply with the requirements in either paragraphs (i), (ii) or (iii) of this condition, unless modified by a Plan Approval.

(i) The enclosed flare, Source ID C10, designed and operated in accordance with the conditions for the source.

(ii) A treatment system that processes the collected gas for subsequent sale or beneficial use such as fuel for combustion, production of vehicle fuel, production of high- Btu gas for pipeline injection, or use as a raw material in a chemical manufacturing process. All emissions from any atmospheric vent from such gas treatment system shall be subject to the requirements of paragraph (a)(i) or (a)(iii).

(iii) a low emissions flare, C12, C13 or C14, designed and operated as required by Plan Approval 09-0210B.

(b) In the event 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 gas to the atmosphere shall be closed within 1 hour of the collection or control system not operating, and

(c) The permittee shall operate the control or treatment system(s) at all times when the collected gas is routed to the system.

#### II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).





#### III. MONITORING REQUIREMENTS.

#### # 009 [25 Pa. Code §127.441] Operating permit terms and conditions.

(a) The permittee shall demonstrate annually the site-specific NMOC concentration and VOC concentration. Except as provided below in paragraphs (a)(i)-(iii), the permittee shall use the following parameters in calculating VOC emission rate: methane generation rate constant, k, equal to 0.023/year; and methane generation potential Lo, equal to 169.9 m3/Mg (Mega gram) of solid waste.

(i) The permittee shall annually reevaluate the k value listed in paragraph (a). The permittee shall submit the results of the reevaluation to the Department. If such reevaluation demonstrates a k value different than that listed in paragraph (a), then the permittee shall provide a notification to the Department of the permittee's intent to use such k value. The notification shall include a discussion of the basis for use of such k value. Within thirty (30) days of its receipt of the notification, the Department may provide to the permittee a written determination, and basis for such determination, rejecting the permittee's use of such alternative parameter.

(ii) In the event that the permittee derives additional data that demonstrates that values different than those listed in paragraph (a) should be used, or otherwise intends to use a value other than the values listed in paragraph (a) (such as the value for the parameter published in the most recent Compilation of Air Pollutant Emission Factors (AP-42)) in the calculation of the annual VOC emission rate pursuant to paragraph (a), then the permittee shall provide a notification to the Department of the permittee's intent to use such alternative parameter. The notification shall include a discussion of the basis for use of such alternative parameter. Within thirty (30) days of its receipt of the notification, the Department may provide to the permittee a written determination, and basis for such determination, rejecting the permittee's use of such alternative parameter.

(iii) Notwithstanding the Department's failure to object within 30 days of notification to the permittee's use of an alternative parameter pursuant to paragraph (a)(i) or (ii), the Department reserves the right to reevaluate such parameters and to reject the permittee's continued use of such alternative parameter.

(b) The permittee shall calculate the NMOC emission rate for the purpose of determining when the collection and control system can be removed by using the equation given in 40 CFR Section 60.764(b).

### # 010 [25 Pa. Code §127.441] Operating permit terms and conditions.

[Additional authority for this condition is derived from 40 CFR Section 60.765(c)(5).]

(a) On a monthly basis, the permittee shall implement a program to monitor for cover integrity and implement cover repairs as necessary.

(b) The permittee shall monitor off-site migration of landfill gas by methods approved by the Department .

# # 011 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 40 CFR Sections 60.765(a)(3); 60.766(a)(1)]

On a monthly basis, the permittee shall measure gauge pressure in the gas collection header at each well.

#### # 012 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 40 CFR Sections 60.763(d); 60.765(c); 60.765(c)(1-3); 60.765(d)(1-4); 60.766(f).]

The permittee shall perform surface monitoring in accordance with the following, or in accordance with an alternative surface monitoring plan approved by the Department.

(a) On a quarterly basis, the permittee shall monitor surface concentrations of methane along the entire perimeter of the





collection area and along a pattern that traverses the landfill at 30 meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover and all cover penetrations. Thus the owner or operator must monitor any openings that are within an area of the landfill where waste has been placed and a gas collection system is required. The permittee may establish an alternative traversing pattern that ensures equivalent coverage. The permittee shall maintain a surface monitoring design plan that includes a topographic map with the monitoring route and the rationale for any site-specific deviations from the 30 meter intervals. Areas with steep slopes or other dangerous areas may be excluded from the surface testing.

(b) In performing the surface monitoring, the permittee shall use an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the following specifications and procedures:

(i) The portable analyzer shall meet the instrument specification provided in section 6 of Method 21 of appendix A of 40 CFR Part 60, except that "methane" shall replace all references to VOC.

(ii) The calibration gas shall be methane, diluted to a nominal concentration of 500 parts per million in air.

(iii) To meet the performance evaluation procedures in Section 8.1 of Method 21 of Appendix A of 40 CFR Part 60 the instrument evaluation procedures of Section 8.1 of Method 21 of Appendix A of 40 CFR Part 60 must be used.

(iv) The calibration procedures provided in Sections 8 and 10 of Method 21 of appendix A of 40 CFR Part 60 must be followed immediately before commencing a surface monitoring scan.

(c) The background concentration shall be determined by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells.

(d) Surface emission monitoring shall be performed in accordance with section 8.3.1 of Method 21 of appendix A of 40 CFR Part 60, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions.

(e) Any closed landfill that has no monitored exceedances of the operational standard in three consecutive quarterly monitoring periods may go to annual monitoring. Any methane reading of 500 ppm or more above background detected during the annual monitoring returns the frequency for that landfill to quarterly monitoring until the landfill has no monitoried exceedance of 500 ppm standard for three consecutive quarterly monitoring periods.

### # 013 [25 Pa. Code §127.441] Operating permit terms and conditions.

[Additional authority is also derived from 40 CFR Sections 60.763(c), 60.765(a)(5), 60.766(a)(2) and (3).]

(a) Pursuant to 40 CFR Section 60.766(a)(3),

The permittee shall monitor the temperature of the wellhead, monthly, using a sampling port and a thermometer, other temperature measurements installed at each wellhead to determine compliance with the operating parameters pursuant to Condition #003 (a) [40 CFR Section 60.763(c)].

The temperature measuring device must be calibrated annually using the procedure in 40 CFR Part 60, Appendix A-1, Method 2, Section 10.3.

(b) Pursuant to 40 CFR Section 60.766(a)(2),

On a monthly basis, the permittee shall monitor each well for nitrogen or oxygen. The nitrogen and oxygen content are are only monitored and recorded. Wells do not need to be adjusted to meet nitrogen or oxygen standards.

(i) The nitrogen level, if monitored, shall be determined by using Method 3C or other Department approved method or an alternative method that was established and approved by the Department pursuant to 40 CFR Section 60.767(c)(2).

(ii) Unless an alternative test method is established as allowed by §60.767(c)(2), the oxygen level must be determined by an oxygen meter using Method 3A, 3C, or ASTM D6522-11 (incorporated by reference, see §60.17).





The oxygen level shall be determined by an oxygen meter using Method 3A, 3C, or ASTM D6522-11 (if sample location is prior to combustion) except that:

(A) The span must be set between 10 and 12 percent oxygen;

(B) A data recorder is not required;

(C) Only two calibration gases are required, a zero and span;

(D) A calibration error check is not required;

(E) The allowable sample bias, zero drift, and calibration drift are  $\pm 10$  percent.

(iii) A portable gas composition analyzer may be used to monitor the oxygen levels provided:

(A) The analyzer is calibrated; and

(B) The analyzer meets all quality assurance and quality control requirements for Method 3A or ASTM D6522-11 (incorporated by reference, see §60.17).

### IV. RECORDKEEPING REQUIREMENTS.

#### # 014 [25 Pa. Code §127.441] Operating permit terms and conditions.

(a) The permittee shall annually calculate and record the VOC emissions from the Fairless Landfill, using Department approved methods.

(b) The permittee shall monitor and record the average or maximum flow rate of landfill gas (scfm) collected from the Fairless landfill on a monthly basis.

# # 015 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 40 CFR Sections 60.768(a); 60.768(b)(1); 60.768(d-e).]

(a) Pursuant to 40 CFR Section 60.768(a),

The permittee shall keep for at least 5 years, up-to-date, readily accessible, on-site records of the design report that triggered 40 CFR Section 60.762(b), the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.

(b) Pursuant to 40 CFR Section 60.768(b),

The permittee shall keep up-to-date, readily accessible records for the life of the control equipment of the data listed below, as measured during the initial compliance determination. Records of subsequent monitoring shall be maintained for a minimum of 5 years. Records of the control device vendor specifications shall be maintained until removal.

(i) maximum expected gas generation flow rate calculated in accordance with 40 CFR Section 60.765 (a)(1) [Condition #029], unless another method is approved by the Department; and

(ii) density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in 40 CFR Section 60.769(a)(1).

(c) Pursuant to 40 CFR Section 60.768(d),

The permittee shall keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector. The





#### permittee shall also keep:

(i) up-to-date, readily accessible records of the installation date and location of all newly installed collectors; and

(ii) readily accessible documentation of the nature, date of deposition, amount and location of asbestos-containing or nondegradable waste excluded from collection, as well as any nonproductive areas excluded from production.

(d) Pursuant to 40 CFR Section 60.768(e)(1),

The permittee shall keep, for at least 5 years, up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in conditions #003 through #005 for the landfill, the reading in the subsequent month, whether or not the second reading is an exceedance, and the location of each exceedance.

(e) Pursuant to 40 CFR Section 60.768 (e)(2),

The permittee shall also keep records of each wellhead temperature monitoring value above 131 °F, each wellhead nitrogen level of 20 percent or higher and each wellhead oxgen level at or above 5 percent, pursuant to the monitoring in Condition #013.

(f) Pursuant to 40 CFR Section 60.768(e)(3), (4) and (5),

The permittee shall keep:

(i) For any root cause analysis for which corrective actions are required in 40 CFR 60.765(a)(3)(i) or (a)(5)(i) [Conditions 4003(b)(i) and 4005(b)(i)], a record of the root cause analysis conducted, including a description of the recommended corrective action(s) taken, and the date(s) the corrective action(s) were completed.

(ii) For any root cause analysis for which corrective actions are required in §60.765(a)(3)(ii) or (a)(5)(ii) [Conditions #03(b)(ii) and #005(b)(ii)], a record of the root cause analysis conducted, the corrective action analysis, the date for corrective action(s) already completed following the positive pressure reading or high temperature reading, and, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates.

(iii) For any root cause analysis for which corrective actions are required in §60.765(a)(3)(iii) or (a)(5)(iii)[Conditions #003(b)(iii) and #005(b)(iii)], a record of the root cause analysis conducted, the corrective action analysis, the date for corrective action(s) already completed following the positive pressure reading or high temperature reading, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates, and a copy of any comments or final approval on the corrective action analysis or schedule from the regulatory agency.

# 016 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1980]

Subpart AAAA - National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills What records and reports must I keep and submit?

[Additional authority for this permit condition is also derived from 40 CFR Sections 63.6(e)(3)(v) and (viii).]

(a) The permitee shall maintain at the affected source a current startup, shutdown, and malfunction plan and must make the plan available upon request for inspection and copying by the Administrator. In addition, if the startup, shutdown, and malfunction plan is subsequently revised pursuant to paragraph (b) or 40 CFR Section 63.6(e)(3)(viii), the permitee must maintain at the affected source each previous (i.e., superseded) version of the startup, shutdown, and malfunction plan, and must make each such previous version available for inspection and copying by the Department for a period of 5 years after revision of the plan. If at any time after adoption of a startup, shutdown, and malfunction plan the affected source ceases operation or is otherwise no longer subject to the provisions of this part, the permittee must retain a copy of the most recent plan for 5 years from the date the source ceases operation or is no longer subject to this part and must make the plan available upon request for inspection and copying by the Department may at any time request in writing that the owner or operator submit a copy of any startup, shutdown, and malfunction plan (or a portion thereof) which is maintained at the affected source or in the possession of the permitee. Upon receipt of such a request, the permittee must promptly submit a copy of the requested plan (or a portion thereof) to the Department, either paper copy or electronic copy.

(b) The owner or operator may periodically revise the startup, shutdown, and malfunction plan for the affected source as necessary to satisfy the requirements of 40 CFR Part 63 Subpart AAAA or to reflect changes in equipment or procedures at the affected source. Unless the permitting authority provides otherwise, the owner or operator may make such revisions to





the startup, shutdown, and malfunction plan without prior approval by the Department. However, each such revision to a startup, shutdown, and malfunction plan must be reported in the semiannual report pursuant to Condition #025 [40 CFR Section 63.10(d)(5)]. If the startup, shutdown, and malfunction plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction but was not included in the startup, shutdown, and malfunction plan at the time the permittee developed the plan, the permittee must revise the startup, shutdown, and malfunction plan within 45 days after the event to include detailed procedures for operating and maintaining the source during similar malfunction events and a program of corrective action for similar malfunctions of process or air pollution control and monitoring equipment. In the event that the permittee makes any revision to the startup, shutdown, or malfunction, or otherwise modifies the applicability of any emission limit, work practice requirement, or other requirement in a standard established under this part, the revised plan shall not take effect until after the owner or operator has provided a written notice describing the revision to the Department.

# # 017 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1980]

Subpart AAAA - National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills What records and reports must I keep and submit?

[Additional authority for this permit condition is also derived from 40 CFR Section 63.6(e)(3)(iii)]

Startup, shutdown, and malfunction plan.

When actions taken by the permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) are consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, the permittee must keep records for that event which demonstrate that the procedures specified in the plan were followed. These records may take the form of a ``checklist," or other effective form of recordkeeping that confirms conformance with the startup, shutdown, and malfunction plan for that event. In addition, the permittee must keep records of these events as specified in 40 CFR Section 63.10(b), including records of the occurrence and duration of each startup, shutdown, or malfunction of operation and each malfunction of the air pollution control and monitoring equipment. Furthermore, the permittee shall confirm that actions taken during the relevant reporting period during periods of startup, shutdown, and malfunction were consistent with the affected source's startup, shutdown and alfunction plan in the semiannual (or more frequent) startup, shutdown, and malfunction report pursuant to Condition #023 [40 CFR Section 63.10(d)(5)].

### # 018 [25 Pa. Code §127.441] Operating permit terms and conditions.

[Authority for this permit condition is also from 40 CFR Section 60.768 (b)(5).]

Where an owner or operator subject to the provisions of 40 CFR Part 60 Subpart XXX seeks to demonstrate compliance with 40 CFR Section §60.762(b)(2)(iii) through use of a landfill gas treatment system, the owner or operator shall keep the following records for 5 years:

(i) Bypass records. Records of the flow of landfill gas to, and bypass of, the treatment system.

(ii) Site-specific treatment monitoring plan, to include:

(A) Monitoring records of parameters that are identified in the treatment system monitoring plan and that ensure the treatment system is operating properly for each intended end use of the treated landfill gas. At a minimum, records should include records of filtration, de-watering, and compression parameters that ensure the treatment system is operating properly for each intended landfill gas.

(B) Monitoring methods, frequencies, and operating ranges for each monitored operating parameter based on manufacturer's recommendations or engineering analysis for each intended end use of the treated landfill gas.

(C) Documentation of the monitoring methods and ranges, along with justification for their use.

(D) Identification of whom is responsible (by job title) for data collection.





(E) Processes and methods used to collect the necessary data.

(F) Description of the procedures and methods that are used for quality assurance, maintenance, and repair of all continuous monitoring systems.

#### V. REPORTING REQUIREMENTS.

# # 019 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 40 CFR Section 60.767(e).]

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

#### # 020 [25 Pa. Code §127.441] Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 40 C.F.R. §60.767(f).]

The permittee shall submit an equipment removal report to the Department 30 days prior to removal or cessation of operation of the control equipment. The equipment removal report shall contain all of the following items:

(a) a copy of the closure report submitted pursuant to Condition #019 [40 CFR Section 60.767(e)].

(b) a copy of the initial performance test report demonstrating that the 15 year minimum control period has expired, unless a report of the performance test has been submitted to the EPA via the EPA's CDX, or information that demonstrates that the GCCS will be unable to operate for 15 years due to declining gas flows. In the equipment removal report, the process units(s) tested, and the date that such performance test was conducted may be submitted in lieu of the performance test report if the report has been previously submitted to EPA's CDX; and

(c) dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 34 Megagrams per year or greater of NMOC per year, unless the NMOC emission rate reports have been submitted to the EPA via the EPA's CDX. If the NMOC emission rate reports have been previously submitted to the EPA's CDX, a statement that the NMOC emission rate reports have been submitted electronically and the dates that the reports were submitted to the EPA's CDX may be submitted in the equipment removal report in lieu of the NMOC emission rate reports.

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

#### # 021 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 40 CFR Section 60.767(g) and 40 CFR Section 63.1980.]

The owner or operator of a landfill seeking to comply with §60.762(b)(2) using an active collection system designed in accordance with §60.762(b)(2)(ii) must submit to the Administrator, following the procedure specified in 40 CFR Section 60.767(i)(2) [Condition #023], annual reports of the recorded information in paragraphs (a) through (h).

(a) value and length of time for exceedance of applicable parameters monitored, that is the gauge pressure in the gas collection header pursuant to Condition #011 and the temperature of the landfill gas pursuant to Condition #013;

Note: Monitored nitrogen or oxygen concentrations must be maintained and made available to the Department upon request. There are no deviations from operational standards or corrective actions for nitrogen or oxygen.





(b) description and duration of all periods when landfill gas was diverted from the control device or treatment system through a bypass line or the indication of bypass flow;

(c) description and duration of all periods when the control device or treatment system was not operating and the length of time the control device or treatment system was not operating;

(d) all periods when the landfill gas collection system was not operating;

(e) the location of each exceedance of the 500 ppm methane concentration at the surface of the landfill and the concentration recorded at each location for which an exceedance was recorded in the previous month. For location an instrument with latitude and longitude coordinates with an accuracy of at least 4 meters must be used. The coordinates must be in decimal degrees with at least five decimal places;

(f) the date of installation and the location of each well or collection system expansion added in response to an exceedance or included as part of the gas collection and control system plan;

(g) For any corrective action analysis for which corrective actions are required for exceedances of wellhead pressure or temperature and that take more than 60 days to correct, the root cause analysis conducted, including a description of the recommended corrective action(s), the date for corrective action(s) already completed following the positive pressure or temperature exceedance and for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates;

(h) exceedances of enclosed flare operational parameters, recorded pursuant to Section E. Group Name:Flares Condition #013.

# 022 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1980] Subpart AAAA - National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills What records and reports must I keep and submit?

[Additional authority for this permit condition is also derived from 40 CFR Section 63.10(d)(5)]

The permittee shall submit the reports semi-annually and the report shall

(a) Identify any instance during which actions taken by the permittee during a start-up, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) were consistent with the procedures specified in the start-up, shutdown, malfunction plan.

(b) Identify any instance where any action taken by permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the affected source's startup, shutdown, and malfunction plan, but the source does not exceed any applicable emission limitation in the relevant emission standard, or any revisions to the startup, shutdown, malfunction plan.

(c) Include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded.

(d) Consist of a letter, containing the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy.

Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period.

# 023 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

[Additional authority for this permit condition is from 40 CFR Section 60.767(i)(2)].

Each owner or operator required to submit reports pursuant to 40 CFR Part 60 Subpart XXX, must submit reports to the EPA





via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) The owner or operator must use the appropriate electronic report in CEDRI for this subpart or an alternate electronic file format consistent with the XML schema listed on the CEDRI Web site (https://www3.epa.gov/ttn/chief/cedri/index.html). If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the owner or operator must submit the report to the Administrator at the appropriate address listed in §60.4 [Section C Condition #018]. Once the form has been available in CEDRI for 90 calendar days, the owner or operator must begin submitting all subsequent reports via CEDRI. The reports must be submitted by the deadlines specified in this subpart, regardless of the method in which the reports are submitted.

# # 024 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Authority for this permit condition is from 40 CFR Section 60.767(j).]

The permittee must submit the following reports to the Administrator

(1) For corrective action that is required according to §60.765(a)(3)(iii) or (a)(5)(iii) [Conditions #003 (b) and #005 (b)] and is expected to take longer than 120 days after the initial exceedance to complete, the root cause analysis, corrective action analysis, and corresponding implementation timeline as soon as practicable but no later than 75 days after the first measurement of positive pressure or temperature monitoring value of in excess of 55 degrees Celsius (131 degrees Fahrenheit). The Administrator must approve the plan for corrective action and the corresponding timeline.

(2) For corrective action that is required according to 60.765(a)(3)(iii) or (a)(5)(iii) [Conditions #003 (b)and #005 (b)] and is not completed within 60 days after the initial exceedance, a notification as soon as practicable but no later than 75 days after the first measurement of positive pressure or temperature exceedance.

# # 025 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1980] Subpart AAAA - National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills What records and reports must I keep and submit?

[Additional authority for this permit condition is also derived from 40 CFR Section 63.6(e)(3)(iv)]

If an action taken by the permittee during a startup or shutdown (and the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards), or malfunction (including actions taken to correct a malfunction) are not consistent with the procedures specified in the affected source's startup, shutdown, malfunction plan, and the source exceeds any applicable emission limitation in the relevant emission standard, then the permittee must record the actions taken for that event and must report such actions within 2 working days after commencing actions inconsistent with the plan, followed by a letter within 7 working days after the end of the event (unless the permittee makes alternative reporting arrangements, in advance, with the Administrator).

# VI. WORK PRACTICE REQUIREMENTS.

# 026 [25 Pa. Code §127.441] Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 40 CFR Section 60.762(b)(2)(v).]

(a) Consistent with the authority of 40 CFR Section 60.762(b)(2)(v), the permittee may cap, remove or decommission the collection and control system provided that all the conditions of paragraphs (i), (ii) and (iii) are met:

(i) The landfill (to include all landfill areas and expansions) shall be a closed landfill, which is defined as a landfill in which solid waste is no longer being placed, and in which no additional solid wastes will be placed without first filing a notification of modification as prescribed under 40 CFR Section 60.7(a)(4). A closure report must be submitted to the Administrator as provided in 40 CFR Section 60.767(e).

(ii) The collection and control system shall have been in operation a minimum of 15 years or the landfill owner or





operator demonstrates that the GCCS will be unable to operate for 15 years due to declining gas flow.

(iii) Following the procedures specified in Condition #027 [40 CFR Section 60.764(b)], the calculated NMOC gas produced by the landfill shall be less than 34 Megagrams per year on three successive test dates. The test dates shall be no less than 90 days apart, and no more than 180 days apart.

(b)

Nothing in this Condition shall be construed to limit or impair any obligation of the permittee to maintain and/or operate the gas collection and control system under then-applicable law other than the Pennsylvania Air Pollution Control Act.

# # 027 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 40 CFR Section 60.764(b).]

The permittee shall calculate the NMOC emission rate for purposes of determining when the collection and control system can be removed, using the following equation:

MNMOC = 1.89 x 10 -3 QFLG CNMOC

MNMOC = mass emission rate of NMOC, megagrams per year QFLG = flow rate of landfill gas, cubic meters per minute CNMOC = NMOC concentration, parts per million by volume as hexane

(a) The flow rate of landfill gas, QFLG, shall be determined by measuring the total landfill gas flow rate at the common header pipe that leads to the control device using a gas flow measuring device calibrated according to the provision of section 4 of Method 2E of appendix A of 40 CFR Part 60.

(b) The average NMOC concentration, CNMOC, shall be determined by collecting and analyzing landfill gas sampled from the common header pipe before the gas moving or condensate removal equipment using the procedures in Method 25 or Method 25C. The sample location on the common header pipe shall be before any condensate removal or other gas refining units. The permittee shall divide the NMOC concentration from Method 25 or Method 25C by six to convert from CNMOC as carbon to CNMOC as hexane.

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

# # 028 [25 Pa. Code §127.441] Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 40 CFR Section 60.765(a)(1).]

(a) For the purposes of calculating the maximum expected gas generation flow rate from the landfill, the equation pursuant to 40 CFR Section 60.765(a)(1)(ii) shall be used, unless another method has been approved by the Department. The k and Lo kinetic factors should be those referenced in Condition #009. A value of no more than 15 years shall be used for the intended use period of the gas mover equipment. The active life of the landfill is the age of the landfill plus the estimated number of years until closure.

(b) If a collection and control system has been installed at the facility, actual flow data may be used to project the maximum expected gas generation flow rate instead of, or in conjunction with, the equation referenced in paragraph (a) above. If the landfill is still accepting waste, the actual measured flow data will not equal the maximum expected gas generation rate, so calculations using the equation referenced in paragraph (a) or other methods shall be used to predict the maximum expected gas generation rate over the intended period of use of the gas control system equipment.





# # 029 [25 Pa. Code §127.441] Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 40 C.F.R. § 60.769(b) and (c)(1).]

(a) The permittee shall construct the gas collection devices using the following equipment and procedures, or in accordance with alternative parameters approved by the Department pursuant to 40 CFR 60.767(c)(2)and (3):

(i) The landfill gas 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. The collection system shall extend as necessary to comply with emission and migration standards. Collection devices such as wells and horizontal collectors shall be perforated to allow gas entry without head loss sufficient to impair performance across the intended extent of control. Perforations shall be situated with regard to the need to prevent excessive air infiltration.

(ii) Vertical wells shall be placed so as not to endanger underlying liners and shall address the occurrence of water within the landfill. Holes and trenches constructed for piped wells and horizontal collectors shall be of sufficient crosssection so as to allow for their proper construction and completion, including, centering of pipes and placement of gravel backfill. Collection devices shall be designed so as not to allow indirect short circuiting of air into the cover or refuse into the collection system or gas into the air. Any gravel used around pipe perforations should be of a dimension so as not to penetrate or block perforations.

(iii) Collection devices may be connected to the collection header piper below or above the landfill surface. The connector assembly shall include a positive closing throttle valve, any necessary seals and couplings, access couplings and at least one sampling port. The collection devices shall be constructed of PVC, HDPE, fiberglass, stainless steel, or other nonporous material of suitable thickness.

(b) The permittee shall convey the landfill gas to the control system through the collection header pipe(s). The gas mover equipment shall be sized to handle the maximum gas generation flow rate expected over the intended use period of the gas moving equipment. For the permittee's existing collection system, the flow data shall be used to project the maximum flow rate. The maximum flow rate for new systems must be in accordance with 40 CFR Section 60.765(a)(1) [Condition #027].

# # 030 [40 CFR Part 61 NESHAPs §40 CFR 61.154] Subpart M--National Emission Standard for Asbestos Standard for active waste disposal sites.

To the extent that the permittee receives asbestos-containing waste material from a source covered under 40 CFR Sections 61.149, 61.150, or 61.155, the permittee shall meet the requirements of this section:

(a) Either there must be no visible emissions to the outside air from any active waste disposal site where asbestoscontaining waste material has been deposited, or the requirements of paragraph (c) or (d) of this section must be met.

(b) Unless a natural barrier adequately deters access by the general public, either warning signs and fencing must be installed and maintained as follows, or the requirements of paragraph (c)(1) of this section must be met.

(1) Warning signs must be displayed at all entrances and at intervals of 100 m (330 ft) or less along the property line of the site or along the perimeter of the sections of the site where asbestos-containing waste material is deposited. The warning signs must:

(i) Be posted in such a manner and location that a person can easily read the legend; and

(ii) Conform to the requirements of 51 cm 36 cm (20"X14") upright format signs specified in 29 CFR 1910.145(d)(4) and this paragraph; and





(iii) Display the following legend in the lower panel with letter sizes and styles of a visibility at least equal to those specified in this paragraph.

LEGEND	NOTATION
Asbestos Waste Disposal Site2.5 c	rm (1 inch) Sans Serif, Gothic or Block
Do Not Create Dust1.9	cm (3/4 inch) Sans Serif, Gothic or Block
Breathing Asbestos is Hazardous to14 Your Health	Point Gothic

Spacing between any two lines must be at least equal to the height of the upper of the two lines.

(2) The perimeter of the disposal site must be fenced in a manner adequate to deter access by the general public.

(3) Upon request and supply of appropriate information, the Administrator will determine whether a fence or a natural barrier adequately deters access by the general public.

(c) Rather than meet the no visible emission requirement of paragraph (a) of this section, at the end of each operating day, or at least once every 24-hour period while the site is in continuous operation, the asbestos-containing waste material that has been deposited at the site during the operating day or previous 24-hour period shall:

(1) Be covered with at least 15 centimeters (6 inches) of compacted nonasbestos-containing material, or

(2) Be covered with a resinous or petroleum-based dust suppression agent that effectively binds dust and controls wind erosion. Such an agent shall be used in the manner and frequency recommended for the particular dust by the dust suppression agent manufacturer to achieve and maintain dust control. Other equally effective dust suppression agents may be used upon prior approval by the Administrator. For purposes of this paragraph, any used, spent, or other waste oil is not considered a dust suppression agent.

(d) Rather than meet the no visible emission requirement of paragraph (a) of this section, use an alternative emissions control method that has received prior written approval by the Administrator according to the procedures described in 40 CFR Section 61.149(c)(2).

(e) For all asbestos-containing waste material received, the owner or operator of the active waste disposal site shall:

(1) Maintain waste shipment records, using a form similar to that shown in Figure 4, and include the following information:

(i) The name, address, and telephone number of the waste generator.

- (ii) The name, address, and telephone number of the transporter(s).
- (iii) The quantity of the asbestos-containing waste material in cubic meters (cubic yards).

(iv) The presence of improperly enclosed or uncovered waste, or any asbestos-containing waste material not sealed in leak-tight containers. Report in writing to the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator (identified in the waste shipment record), and, if different, the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the disposal site, by the following working day, the presence of a significant amount of improperly enclosed or uncovered waste. Submit a copy of the waste shipment record along with the report.





### (v) The date of the receipt.

(2) As soon as possible and no longer than 30 days after receipt of the waste, send a copy of the signed waste shipment record to the waste generator.

(3) Upon discovering a discrepancy between the quantity of waste designated on the waste shipment records and the quantity actually received, attempt to reconcile the discrepancy with the waste generator. If the discrepancy is not resolved within 15 days after receiving the waste, immediately report in writing to the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator (identified in the waste shipment record), and, if different, the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the disposal site. Describe the discrepancy and attempts to reconcile it, and submit a copy of the waste shipment record along with the report.

(4) Retain a copy of all records and reports required by this paragraph for at least 2 years.

(f) Maintain, until closure, records of the location, depth and area, and quantity in cubic meters (cubic yards) of asbestoscontaining waste material within the disposal site on a map or diagram of the disposal area.

(g) Upon closure, comply with all the provisions of 61.151.

(h) Submit to the Administrator, upon closure of the facility, a copy of records of asbestos waste disposal locations and quantities.

(i) Furnish upon request, and make available during normal business hours for inspection by the Administrator, all records required under this section.

(j) Notify the Administrator in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at a waste disposal site and is covered. If the excavation will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the Administrator at least 10 working days before excavation begins and in no event shall excavation begin earlier than the date specified in the original notification. Include the following information in the notice:

(1) Scheduled starting and completion dates.

(2) Reason for disturbing the waste.

(3) Procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material. If deemed necessary, the Administrator may require changes in the emission control procedures to be used.

(4) Location of any temporary storage site and the final disposal site. (Sections 112 and 301(a) of the Clean Air Act as amended (42 USC 7412, 7601(a))

# 031 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1955] Subpart AAAA - National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills What requirements must I meet?

[Additional authority for this permit condition is also derived from 40 CFR Section 63.6(e)(1)(i) and (ii).]

(a) During a period of startup, shutdown, or malfunction, the general duty to minimize emissions requires that the permittee reduce emissions from the affected source to the greatest extent which is consistent with safety and good air pollution control practices. The general duty to minimize emissions during a period of startup, shutdown, or malfunction does not require the permittee to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved.





(b) Malfunctions must be corrected as soon as practicable after their occurrence in accordance with the startup, shutdown, and malfunction plan pursuant to 40 CFR Section 63.6(e)(3). To the extent that an unexpected event arises during a startup, shutdown, or malfunction, a permittee must comply by minimizing emissions during such a startup, shutdown, and malfunction event consistent with safety and good air pollution control practices.

# VII. ADDITIONAL REQUIREMENTS.

# 032 [25 Pa. Code §127.441] Operating permit terms and conditions.

[Authority for this condition is derived from 40 CFR Section 60.765(e).]

The provisions of 40 CFR Part 60, Subpart XXX set forth in this permit shall apply at all times including during periods of start-up, shutdown, or malfunction. During periods of startup, shutdown or malfuntion, the permittee must comply with the work practice standard in 40 CFR Section 60.763(e) [Condition #008(b)] rather than the operational standards of 40 CFR Section 60.765 [Conditions #003 and #005].

\*\*\* Permit Shield in Effect. \*\*\*



WASTE MGMT OF FAIRLESS/FAIRLESS LDFL

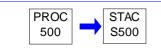


# SECTION D. Source Level Requirements

Source ID: 500

# Source Name: EXEMPT EMERGENCY GENERATOR ENGINES

Source Capacity/Throughput:



# I. RESTRICTIONS.

# **Emission Restriction(s).**

# # 001 [25 Pa. Code §123.21]

General

No person may permit the emission into the outdoor atmosphere of sulfur oxides from this source in a manner that the concentration of the sulfur oxides, expressed as SO2, in the effluent gas exceeds 500 ppmvd.

# # 002 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

All exempt emergency engines on site shall not exceed the following combined NOx emission limits:

a. 100 lbs per hour,

b. 1000 lbs per day,

- c. 2.75 tons per ozone season (May 1 through September 30), and
- d. 6.6 tons per year, on a 12-month rolling basis.

# Fuel Restriction(s).

# 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall use only diesel fuel as fuel for these engines.

# II. TESTING REQUIREMENTS.

# 004 [25 Pa. Code §139.16] Sulfur in fuel oil.

(a) The following are applicable to the analysis of commercial fuel oil:

(1) The fuel oil sample for chemical analysis shall be collected in a manner that provides a representative sample. Upon the request of a Department official, the person responsible for the operation of the source shall collect the sample employing the procedures and equipment specified in 25 Pa. Code § 139.4(10) or (21) (relating to references);

(2) Test methods and procedures for the determination of sulfur shall be those specified in 25 Pa. Code § 139.4(12)--(15) and (20).

(3) Results shall be reported in accordance with the units specified in 25 Pa. Code § 123.22 (relating to combustion units).

(b) The requirements in subpart (a), above, shall be waived in the event that a delivery receipt from the supplier, showing the maximum percent sulfur in the fuel, is obtained each time a fuel oil delivery is made.

# III. MONITORING REQUIREMENTS.

### # 005 [25 Pa. Code §127.441] Operating permit terms and conditions.

operating permit terms and conditi

The permittee shall monitor:

(a) The hours of operation per generator on a monthly and 12-month rolling basis.

(b) The permittee shall monitor total combined NOx emissions from the engines in units of:





#### - Ibs/hr

- Ibs/day, when operating,
- tons per ozone season, and
- tons per year, on a monthly and 12-month rolling basis.

# IV. RECORDKEEPING REQUIREMENTS.

#### # 006 [25 Pa. Code §127.441] Operating permit terms and conditions.

The permittee shall maintain the following records:

(a) The hours of operation per generator, on a monthly and 12-month rolling basis.

(b) The permittee shall maintain records of total combined NOx emissions in units of:

- Ibs/hr

- lbs/day, when operating,

- tons per ozone season, and

- tons per year, on a monthly and 12-month rolling basis

# 007 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

The permittee shall obtain and maintain records of delivery receipts from the fuel supplier each time a fuel oil delivery is made, which shows the maximum percent sulfur in the fuel. In the event that a delivery receipt is not obtained, the permittee shall obtain a sample and perform a fuel analysis in accordance with Condition #005 of this section.

# # 008 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR § 63.6655]

For all engines, the permittee shall maintain records of:

(a) The occurence and duration of each malfunction of operation and the corrective actions taken during periods of malfunction to minimize emissions.

(b) Any performance tests and performance evaluations

(c) All maintenance that is performed, including oil changes, filter changes, hose and belt replacements. Maintenance records shall include the engine hour meter reading at the time the maintenance is conducted.

(d) The number of hours the engine is operated for emergencies, including the nature of the emergency.

(e) The number of hours the engine is operated for non-emergencies.

# V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

# VI. WORK PRACTICE REQUIREMENTS.

# # 009 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR § 63.6625(i).]

The permittee has the option of using an oil analysis program, in order to extend the oil change requirement in Condition





#### #015 of this section.

(a) The oil analysis must be performed at the same frequency specified in 40 CFR Part 63 Subpart ZZZZ Table 2d Item 4 (Condition #015 of this section). The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis.

(b) If the engine is not in operation when the results of the analysis in paragraph (a) are received, the engine owner or operator must change the oil within 2 business days of receiving the results or before commencing operation, whichever is later, pursuant to 40 CFR Section 63.6625(i).

(c) If the permittee uses an oil analysis program, as indicated in paragraph (a), the oil analysis program shall be part of the maintenance plan for the facility, as required by 40 CFR Section 63.6625(i).

# # 010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR § 63.6640(f).]

The following is applicable to all exempt emergency diesel generator engines:

In accordance with 40 CFR section 63.6640(f),

The owner/operator shall operate each engine according to the requirements in paragraphs (a) through (c) of this condition.

In order for the engine to be considered an emergency stationary RICE under 40 CFR Part 63, Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (a) through (c), is prohibited. If the engine is not operated according to the requirements in paragraphs (a) through (c), the engine will not be considered an emergency engine under 40 CFR Subpart ZZZZ and must meet all requirements for non-emergency engines.

(a) There is no time limit on the use of either engine in emergency situations unless elsewhere specified.

(b) The emergency engine may be operated for any combination of purposes specified in this paragraph for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (c) of this condition counts as part of the 100 hours per calendar year allowed by paragraph (b) of this condition.

The emergency engine may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of the engine beyond 100 hours per year.

(c) The emergency engine may be operated for up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing, provided in paragraph (b). Except as provided in paragraphs (c)(A) through (E) of this condition, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.





(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

# # 011 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR § 63.6625(f).]

All engines shall be installed with a non-resettable hour meter.

# 012 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR §§ 63.6605(b) and 63.6625(e).]

All engines shall be operated and maintained in a manner consistent with good operating and maintenance practices, and in accordance with manufacturer's specifications.

# 013 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR § 63.6625(h).]

The permittee shall minimize each engine's time spent at idle and minimize each engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

# 014 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6603]

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

What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?

As specified in Table 2d of the RICE MACT Subpart ZZZZ, for each existing stationary CI RICE located at an area source of HAP emissions, the permittee shall:

(a) Change oil and filter every 500 hours of operation or annually, whichever comes first;

(b) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and

(c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

# VII. ADDITIONAL REQUIREMENTS.

# # 015 [25 Pa. Code §127.441]

Operating permit terms and conditions.

This source consists of the following emergency generator engines:

(1) New Leachate Treatment Plant emergency generator - Caterpillar 3456, 500 ekW

- Model No. 235-4664





- 764 hp - 2003 model year engine, installed February 1, 2013 (2) SBR Area emergency generator - Cummins - Serial no. 30372305 & 308128 - 605 hp - 2005 model year engine, installed August 15, 2005 (3) Scale House emergency generator - Power Tech 8.1 liter by John Deere, 225 kW - Serial no. RG6081A122825 - 302 hp - 2000 model year engine, installed in 2001 (4) Old Leachate Treatment Plant emergency generator - Caterpillar 3406 - Serial No. 4ZR02709 - 536 hp - 1997 model year engine, installed in 1998 #016 [25 Pa. Code §127.441] Operating permit terms and conditions.

This source is subject to the National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (40 CFR Part 63, Subpart ZZZZ). The permittee shall comply with all applicable requirements.

\*\*\* Permit Shield in Effect. \*\*\*

09-00210

WASTE MGMT OF FAIRLESS/FAIRLESS LDFL



# SECTION D. Source Level Requirements

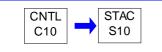
Source ID: C10

Source Name: BACK-UP ENCLOSED FLARE FAIRLESS 1

Source Capacity/Throughput: 300.000 MCF/HR

LANDFILL GAS

Conditions for this source occur in the following groups: FLARES



# I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# \*\*\* Permit Shield in Effect. \*\*\*





Group Name: FLARES

09-00210

Group Description: new flares for fairless

Sources included in this group

ID Name

C10 BACK-UP ENCLOSED FLARE FAIRLESS 1

# I. RESTRICTIONS.

#### **Emission Restriction(s).**

# # 001 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

(a) Each back-up enclosed flare C10 and C11 (to be installed under Plan Approval 09-0210A) shall comply with the following emissions limits:

VOC (as hexane): 1.40 lb/hr;

NOx: 0.08 lb/MMBtu, 12.12 lb/hr;

CO: 0.20 lb/MMBtu, 30.29 lb/hr;

SO2: 12.7 lb/hr;

PM, PM10 and PM2.5 (filterable and condensable): 0.011 lb/MMBtu, 1.71 lb/hr

(b) The combination of the enclosed flares, Source IDs C10 and C11 (to be installed under Plan Approval 09-0210A), shall comply with the following emissions limits, on a 12-month rolling basis:

VOC (as hexane): 1.80 tons/year NOx: 16.1 tons/year CO: 40.14 tons/year SO2: 16.8 tons/year PM, PM10, PM2.5 (condensable and filterable): 2.27 tons/year

[Compliance with the PM-10 limit in this permit condition assures compliance with the 25 Pa. Code Section 123.13 and the BAT analysis under 25 Pa. Code Section 127.12(a)(5)]

# Fuel Restriction(s).

# # 002 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

(a) Flares C10 and C11 (to be installed under Plan Approval 09-0210A) when used as back-up flares, shall burn on-site landfill gas generated only from the Fairless Landfill, except when auxiliary fuel is used during restart or start-up.

(b) Flares C10 and C11 (to be installed under Plan Approval 09-0210A), shall be used as a back-up flares during the periods of start-up, shakedown, scheduled maintenance, malfunction in the gas transfer or pre-treatment system, reduced utilization by the end-user, or when unavoidable due to circumstances beyond the control of the permittee.

(c) Flares C10 and C11 (to be installed under Plan Approval 09-0210A), may have additional functions to those in part (b) of this condition, provided these have been defined by Plan Approval.

(d) Flares C10 and C11 (to be installed under Plan Approval 09-0210A), may have additional fuel sources to those in part (a) of this condition, provided these have been defined by Plan Approval.

Note: In accordance with Plan Approval 09-0210B, flares C10 and C11 are approved to be used as the primary control for the landfill gas from GROWS, GROWS North and Fairless landfills on an interim basis, as in the case of maintenance on





the Enclosed ULE Flares 1,2, and 3.

# **Throughput Restriction(s).**

# # 003 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

(a) Operation of each flare, C10 and C11 (to be installed under Plan Approval 09-0210A), shall be limited to a maximum of 150 MMBtu/hr averaged hourly and 5,000 scfm (at 50% methane) of landfill gas.

(b) The permittee shall limit the operation of the combination of back-up enclosed flare C10 and back-up enclosed flare C11 (to be installed under Plan Approval 09-0210A) to a heat input of 401,355 MMBtu, calculated with the higher heating value of the landfill gas, on a 12-month rolling sum basis.

# Control Device Efficiency Restriction(s).

# # 004 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

[Additional authority for this permit condition is from 40 CFR Section 60.762(b)(2)(iii)(B).]

Each of the enclosed flares, C10 and C11 (to be installed under Plan Approval 09-0210A) shall be operated to either reduce the nonmethane organic compounds (NMOC) present in the collected landfill gas by 98 weight per cent or reduce the outlet NMOC concentration to less than 20 ppmv on a dry basis as hexane at three percent oxygen, whichever is least stringent.

#### II. TESTING REQUIREMENTS.

# # 005 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

(a) The permittee shall submit one paper copy plus one electronic copy of all source test submissions (notifications, protocols, reports, supplemental information, etc.) to both the AQ Program Manager for the Southeast Regional Office and the PSIMS Administrator in Central Office (mail and email addresses are provided below). Any questions or concerns about source testing submissions can be sent to RA-EPstacktesting@pa.gov and the PSIMS Administrator will address them.

(b) The following pertinent information shall be listed on the title page.

1. Test Date(s)

a. For protocols, provide the proposed date on which testing will commence or "TBD"

b. For reports, provide the first and last day of testing

2. Facility Identification Number (Facility - ID): For test programs that were conducted under a multi-site protocol, also include the PF Id under which the protocol was stored in PSIMS, as indicated in the protocol response letter.

3. Source ID(s) for the applicable source(s) and air pollution control device(s): The term Source ID is used in the permit but "Other Id" is used in DEP electronic systems. They are the same number and must also be listed for control equipment

- 4. Testing Requirements (all that apply)
- a. Plan approval number(s)
- b. Operating permit number
- c. Applicable federal subpart(s) (i.e. 40 CFR 60, Subpart JJJJ)
- d. Special purpose(s) (Consent Order, RFD, RACT II, Tier II, etc.)

(c) Mail all paper submissions to both the PSIMS Administrator and the Air Quality Program Manager for the Southeast Regional Office. Mailing addresses are provided below.





Central Office Pennsylvania Department of Environmental Protection Attn: PSIMS Administrator P.O. Box 8468 Harrisburg, PA 17105-8468

Southeast Region Pennsylvania Department of Environmental Protection Attn: Air Quality Program Manager 2 East Main Street Norristown, PA 19401

(d) Eliminate shading, color ink for data emphasis, small font size, and color saturation as the scanning to create an electronic file is done in black and white. Shading and color emphasis do not scan well and make the electronic copies difficult to read.

(e) Email all electronic submissions to both the PSIMS Administrator in Central Office and the Air Quality Program Manager for the Southeast Regional Office. Email addresses are provided below.

Central Office RA-EPstacktesting@pa.gov

Southeast Region RA-EPSEstacktesting@pa.gov

(f) The Department limits emails to 15 MB and PSIMS has a file size limitation of 100 MB for electronic files. Submit just one electronic file (convert any Microsoft Word or Excel files to an Adobe PDF format and combine them with the report or protocol), unless the submission contains CONFIDENTIAL information.

(g) If confidential information must be submitted, submit both a public copy, which has been redacted, and a confidential copy. The cover page of each submittal should state whether it is a "Public Copy" or "Confidential Copy" and each page of the latter must be marked "CONFIDENTIAL".

# # 006 [25 Pa. Code §127.441] Operating permit terms and conditions.

(a) The permittee shall perform a stack test using the Department-approved procedures once every five (5) calendar years, where five calendar years is defined as beginning with the calendar year the latest stack test was performed and ending on December 31, five years later. Performance tests shall be conducted while the source is operating at maximum routine operating conditions or under such other conditions, within the capacity of the equipment, as may be requested by the Department. When testing of a source is required on a recurring basis, a single procedural protocol may be submitted for approval; thereafter, a letter referencing the previously approved procedural protocol is sufficient. However, if modifications are made to the process(es), if a different stack testing company is used, or if an applicable section of the stack testing manual has been revised since approval, a new protocol must be submitted for approval.

Note: The above Condition applies to each flare after was constructed and tested once under Plan Approval 09-0210A.

(b) At least ninety (90) days prior to the test, the permittee shall submit to the Department (see Condition #005) for approval the procedures for the test and a sketch with dimensions indicating the location of sampling ports and other data to ensure the collection of representative samples.

(c) The stack test shall, at a minimum, test for VOC, NMOC. NOx, CO, SO2. Tests shall be conducted in accordance with the provisions of EPA Methods 25A or 25 and 18, 7E, 10, and 6C or other Department approved methodology, 25 Pa. Code Chapter 139 and 40 CFR Part 60 Subpart XXX.

Either NMOC destruction efficiency or NMOC outlet concentration in parts per million volume, dry basis, at 3% oxygen, shall also be determined. Emissions shall be expressed on a lb/hr basis for VOC, NOx, CO and SO2 and additionally on a lb/MMBtu basis for NOx and CO.





(d) At least thirty (30) days prior to the test, the Regional Air Quality Manager and the PSIMS Administrator in the Department's Central Office, shall be informed of the date and time of the test (see Condition #005).

(e) Within sixty (60) days after the source test(s), one electronic and one hard copy, including all operating conditions, shall be submitted to the Regional Air Quality Manager and to the PSIMS Administrator in the Department's Central Office for approval (see Condition #005).

(f) In the event that any of the above deadlines cannot be met, the permittee may request an extension for the due date(s) in writing and include a justification for the extension. The Department may grant an extension for a reasonable cause.

# III. MONITORING REQUIREMENTS.

#### # 007 [25 Pa. Code §127.441] Operating permit terms and conditions.

[Authority for this permit condition is derived by 40 CFR Sections 60.766(b)(1) and 60.766(b)(2)(i) and (ii).]

The permittee shall calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment when operating each of the back-up enclosed flares, C10 or C11 (to be installed under Plan Approval 09-210A).

(a) A temperature monitoring device equipped with a continuous recorder and having an accuracy of (+/-) 1 percent of the temperature being measured expressed in degrees Celsius or (+/-) 0.5°C, whichever is greater.

(b)

(i) A gas flow rate measuring device that provides a measurement of gas flow to the control device. The permittee shall operate, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; and

(ii) Secure any 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 must be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.

# # 008 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

The permittee shall monitor the methane (CH4) content of the landfill gas to the flare at the minimum of once daily during the operation of the flare.

(a) The monitoring shall be performed with a field meter, maintained as specified in Work Practice Condition #018.

(b) The Department may approve an alternate device or procedure for determining methane content, upon notice, in case of unavailability of a field test meter.

(c) The Department reserves the right to re-evaluate these conditions for methane monitoring of landfill gas to the flare and require alternate or additional monitoring conditions.

### # 009 [25 Pa. Code §127.441] Operating permit terms and conditions.

(a) The permittee shall monitor the hours of operation when each flare (C10 or C11 (to be installed under Plan Approval 09-0210) is in operation.

(b) The permittee shall calculate the VOC, NOx, CO, SO2, PM, PM10 and PM2.5 emissions from each enclosed flare on a monthly basis.

(c) The permittee shall calculate the VOC, NOx, CO, SO2, PM, PM10 and PM2.5 emissions from each and from the combination of both enclosed flares, Source IDs C10 and C11(when it is installed), on a 12-month rolling basis.

(d) Emissions factors from the most recent performance test, or if unavailable, from the Plan Approval application 09-0210A,





or other Department approved factors, shall be used in the emissions calculations.

### IV. RECORDKEEPING REQUIREMENTS.

# # 010 [25 Pa. Code §127.441]

**Operating permit terms and conditions.** The permittee shall record the following when each flare is operating.

(a) the hours of operation

09-00210

(b) the gas flow rate, every 15 minutes, in scfm

(c) the CH4 content and the device used for measurement

(d) the field calibration check for the meter used to measure the methane content.

(e) a detailed explanation for flare operation, including the equipment that was off-line and the reason for its unavailability.

(f) the initial temperature set point of the flare and any change afterwards.

# # 011 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The permittee shall use the landfill gas flow in scfm to each flare, the percent methane concentration and the higher heating value of methane to calculate the heat input to the flare in order to demonstrate compliance with the limits in Section E (Group Name:Flares).

# # 012 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall record the following on a monthly and 12-month rolling sum basis:

(a) the heat input (MMBtu) to each flare

(b) the hours of operation of each flare

(c) VOC, NOx, CO, SO2, PM, PM10 and PM2.5 emissions from each and from the combination of both enclosed flares, C10 and C11 (when it is installed).

# # 013 [25 Pa. Code §127.441] Operating permit terms and conditions.

[Authority for this permit condition is also from 40CFR Section 60.768(c).]

(a) The permittee shall keep up-to-date, readily accessible records for the life of each enclosed flare, (C10 or C11 (when it is installed)) on-site records of the flowrate of landfill gas to each enclosed flare and the temperature of each enclosed flare, and the monthly inspections of the flare bypass valve [Condition #007 (b)(ii)] and shall record the following as exceedances of the operational standards of 40 C.F.R. Part 60, Subpart XXX:

(i) All 3-hour periods of operation during which the average combustion temperature was more than 28°C below the average combustion temperature during the most recent performance test; and

(ii) All periods during which landfill gas flow to either flare (C10 or C11 when it is installed) was bypassed directly to the atmosphere for a period of one hour or more.

(b) The permittee shall maintain on-site records of the following information for a minimum of five (5) years:

i. The operating time and dates of each enclosed flare,







- ii. Performance tests of each enclosed flare,
- iii. Twelve (12) month rolling summation of the VOC, SOx, CO, PM and NOx emissions.
- iv. The average flare temperature for each three hour period of operation.

(c) The permittee shall keep up-to-date, readily accessible records for the life of each enclosed flare of the following data, as measured during the initial performance test or compliance determination:

(i) The average combustion temperature measured at least every 15 minutes and averaged over the same time period as the performance test.

(ii) The percent reduction of NMOC achieved by the flare, determined as specified in 40 C.F.R. 60.762(b)(2)(iii)(B), unless an alternative recordkeeping standard has been approved by the Administrator.

# V. REPORTING REQUIREMENTS.

# 014 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall submit an annual report of the flow rate of the landfill gas to each flare to the Department.

#### VI. WORK PRACTICE REQUIREMENTS.

# 015 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Presence of the pilot shall be confirmed visually when the flare is to be ignited.

# 016 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

Each flare shall

(a) be equipped with a pilot, and

(b) be designed to meet the criteria for automatic system shutoff if a flame-out occurs.

# 017 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR Section 60.768(c)(1)(i).]

The flare design and its operation shall conform to each of the following:

(a) The average operating temperature of either flare (C10 or C11 when it is installed) shall be, for each 3-hour period of operation, not more than 28C (50.4F) below the average combustion temperature measured during the most recent performance test, at which compliance with the emissions limitations in Conditions #001 and #004 of this section was demonstrated.

(b) Based on the performance test of August 16, 2018, the permittee shall operate the C10 flare at a minimum of temperature of 1547°F(841.7°C), based on a 3-hour rolling average. This minimum temperature shall be maintained until superceded by another performance test or findings of the Department's Source Test Group's in its review of the August 16, 2018 stack test report.

(c) The flare (C10 or C11 when it is installed) shall be allowed an appropriate warm up sequence as per manufacturer's specifications, to attain the minimum operating temperature.

(d) Each flare shall be designed for a minimum retention time of 0.7 seconds at 1800 F.

(e) The Department reserves the right to revise the operating temperature range of the flare, based on stack testing results or other information.

# 018 [25 Pa. Code §127.441] Operating permit terms and conditions.





The field meter, used for monitoring methane content of the landfill gas to the flare, shall be re-calibrated either annually or at the minimum frequency specified by the manufacturer, whichever is more frequent, or whenever the error in the midrange calibration check exceeds +/- 10 percent.

# VII. ADDITIONAL REQUIREMENTS.

09-00210

# # 019 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Flare C10 shall be a John Zink Hamworthy ZTOF, Serial No. BF4167777.

# 020 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Authority for this condition is derived from 40 CFR Section 60.765(e).]

The provisions of 40 CFR Part 60, Subpart XXX set forth in this permit shall apply at all times including during periods of start-up, shutdown, or malfunction. During periods of startup, shutdown or malfunction, the permittee must comply with the work practice standard in 40 CFR Section 60.763(e), as follows:

In the event the collection or control system is not operating, the gas mover system must be shut down and all the valves in the collection and control system contributing to venting of the gas to the atmosphere must be closed within 1 hour of the collection or control system not operating.

# 021 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

Note: Source ID C11, a second back-up flare which was authorized by Plan Approval 09-0210A, has not been installed as of the issuance of this permit. Plan Approval 09-0210A, and its subsequent extensions, with the conditions related to C11 will remain in effect until completion of construction and incorporation of C11 into this operating permit.

# \*\*\* Permit Shield in Effect. \*\*\*





Group Name: SBR GROUP

09-00210

Group Description: TK-5 and TK-6

Sources included in this group

ID	Name
007	SEQUENTIAL BATCH REACTOR (TK-5)
011	SEQUENTIAL BATCH REACTOR (TK-6)

# I. RESTRICTIONS.

# **Emission Restriction(s).**

# # 001 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

Ammonia emissions from each Sequential Batch Reactor shall be less than 10.7 tons per year on a 12-month rolling sum basis.

#### # 002 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

Total ammonia emissions from all units in the Leachate Treatment Plant Section H (B) shall not exceed 25.0 tons per year on a 12-month rolling basis.

# **Throughput Restriction(s).**

# 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Flow to each Sequential Batch Reactor shall not exceed a rate of 300,000 gallons per day.

# II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

# III. MONITORING REQUIREMENTS.

# 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall monitor the source daily for compliance with the flow rate limitation for this source.

(b) The permittee shall monitor the Sequential Batch Reactor (SBR) daily for pH during the oxic phase.

(c) The permittee shall calculate ammonia emissions from the SBR on a monthly and on a 12-month rolling basis.

(d) The permittee shall calculate an average for the pH in the SBR during the oxic phase on a 30-day rolling basis.

(e) The permittee shall calculate ammonia emissions from all sources of the leachate treatment plant, excluding the inactive crystallizers, on a monthly and 12-month rolling basis.

#### IV. RECORDKEEPING REQUIREMENTS.

# # 005 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

The permittee shall keep records of the monitoring required for this source.

# V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).





# VI. WORK PRACTICE REQUIREMENTS.

# 006 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

The average pH in the Sequential Batch Reactor during the oxic phase shall be below 7.80, as calculated on a 30-day rolling basis.

# VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

# \*\*\* Permit Shield in Effect. \*\*\*





# SECTION F. Alternative Operation Requirements.

No Alternative Operations exist for this Title V facility.





# SECTION G. Emission Restriction Summary.

Source Id	Source Descriptior		
110	MSW LANDFILL - FAIRLESS		
<b>Emission Limit</b>			Pollutant
22.610	Tons/Yr	calculated after closure in accordance with the definition of "closed landfill" and"closure" in 40 CFR Section 60.761	VOC
C10	BACK-UP ENCLOSED FLARE FAIRLESS 1		
<b>Emission Limit</b>			Pollutant
0.200	Lbs/MMBTU		CO
30.290	Lbs/Hr		СО
40.140	Tons/Yr	1C10 & C11, 12-month rolling sum	СО
20.000	PPMV	dry, at 3% oxygen or 98% destruction efficiency	NMOC
0.080	Lbs/MMBTU		NOX
12.120	Lbs/Hr		NOX
16.100	Tons/Yr	C10 & C11, 12-month rolling sum	NOX
0.011	Lbs/MMBTU	CONDENSABLE & FILTERABLE	PM10
1.710	Lbs/Hr	CONDENSABLE & FILTERABLE	PM10
2.270	Tons/Yr	C10 & C11, CONDENSABLE & FILTERABLE	PM10
0.011	Lbs/MMBTU	CONDENSABLE & FILTERABLE	PM2.5
1.710	Lbs/Hr	CONDENSABLE & FILTERABLE	PM2.5
2.270	Tons/Yr	C10 & C11, CONDENSABLE & FILTERABLE	PM2.5
12.700	Lbs/Hr		SO2
16.800	Tons/Yr	C10 & C11, 12-MONTH ROLLING SUM	SO2
0.011	Lbs/MMBTU	CONDENSABLE & FILTERABLE	TSP
1.710	Lbs/Hr	CONDENSABLE & FILTERABLE	TSP
2.270	Tons/Yr	C10 & C11, CONDENSABLE & FILTERABLE, 12-MONTH ROLLING SUM	TSP
1.400	Lbs/Hr	as hexane	VOC
1.800	Tons/Yr	C10 & C11, 12-month rolling sum	VOC

# **Site Emission Restriction Summary**

Emission Limit		Pollutant
99.999 Tons/Yr	less than 100 tons per year on a 12-month rolling sum basis total from Fairless Landfill, GROWS Landfill and GROWS North Landfill	PM10
99.999 Tons/Yr	less than 100 tons per year on a 12-month rolling basis total from Fairless Landfill, GROWS Landfill and GROWS North landfill	PM2.5





SECTION G. Emission Restriction Summary.





09-00210

March, 2020

(A) Plan Approval 09-0210A serves as the basis for this initial issuance of the Operating Permit, APS 950025 AUTH 1197585.

In addition, listings and conditions from the GROWS permit 09-00007, for the following sources were included: Sources 007, 011 - Sequential Batch Reactors Source 500 - Exempt Emergency Generators

(B) Sources at the Leachate Treatment Plant include the Sequential Batch Reactors, Source IDs 007 and 011, and the following units which do not require additional limitations, monitoring or recordkeeping beyond the requirements in Section C: Reactors, Clarifer, Evaporator, Centrifuge, and Filter Presses Treatment Process tanks
Leachate Storage Tanks
Kerosene Heaters (600,000 Btu/hr)
Waste Oil Space Heater (225, 000 Btu/hr)
Forced Air Heaters (340,000 Btu/hr)
Diesel Storage Tanks (1 - 1,000 gal and 1-275 gal.)
No.2 heating oil Tanks (1000,000 gal. ASTs)
Effluent Storage Tank (550 gal. AST)
Waste Oil Storage Tank (550 gal. AST)
Propane Powered Washer (657,000 Btu/hr)
Kerosene Storage Tank (2000 gal. AST)

(C) The following conditions were updated from Plan Approval 09-0210A. Condition numbers refer to the Condition Number for the April 14, 2015 issuance of the Plan Approval. [Condition number in the Operating Permit is in brackets, if different]

Section C

Condition #006

The training of persons in opacity readings was added to the visible emissions exemptions to conform to the regulation as stated and current DEP guidelines.

Condition #009

A reference to the Department's Source Testing manual was added to the testing condition and the reference to sources in Section A of the Operating Permit was removed, per current DEP guidelines.

# Condition #011, #013 [#011, #014]

Procedures for calculating particulate matter emissions by using the emissions factors from Plan Approval 09-0210A were included.

# Condition #015 [#018]

The condition pertaining to malfunction, emergencies and incidents reporting was replaced with a generic Commonwealth-wide reporting condition. Some of the requirements are different namely 1-hour reporting rather than immediate reporting is required for emissions posing an imminent danger, 3-business days are allowed rather than 2 for follow-up reporting.

#### Condition #016

The condition requiring the reporting of the design capacity was removed, as the report was received on May 9, 2016.

#### Condition #017 [#018]

A paragraph was added to the physical addresses for report submission that specifies that the addresses are to be used only if EPA's electronic reporting tools are not available.

#### Conditions #018, #019

The source reporting conditions were removed from Section C since the requirements are now in Section B, Condition #031.

#### Condition #020 [#022]

The municipal and residual waste regulations were removed as an authority for the condition, specifying actions to reduce fugitive emissions from roadways. Included authority of 25 Pa. Code Sections 123.1(c) and 127.441 are sufficient.





09-00210

# Condition #021 [#023]

The citations from 40 CFR Part 60 Subpart WWW were replaced with comparable citations from the newly applicable 40 CFR Part 60 Subpart XXX.

# Condition #022 [#025]

The phrase "As specified in Section D" was removed from the condition stating the applicability of 40 CFR Subparts. in case the Subparts are revised and no longer consistent with Section D of the permit.

# Additional Conditions

The following standard DEP conditions, applicable or relevant to facilities with Operating Permits, or Title V permits were added: \*Recordkeeping of de minimis emissions increases

- \*The annual compliance certification and bi-annual deviation reporting
- \*Operation of sources according to good operating practices and according to manufacturer's specifications
- \*Application for a plan approval if excess emissions are observed from any source
- \*Prohibition of facility modifications without DEP approval, except for exceptions stated in Section B.

\*Single source treatment for applicability analyses at GROWS, GROWS North and Fairless landfills was specified for consideration in future projects. The three landfills would be treated as one facility for applicability determinations including, but not limited to, the following air programs: non-attainment new source review (NNSR), prevention of significant deterioration (PSD), maximum achievable control technology (MACT) standards and, accidental release prevention program requirements. With this Operating Permit, DEP determined that Fairless consitutes a seperate facility from GROWS and GROWS North for determining applicability of NSPS 40 CFR Part 60, Subpart XXX and the National Emission Standards for Hazardous Air Pollutants:Municipal Solid Waste Landfills, 40 CFR Part 63, Subpart AAAA.

# Condition #023

The conditions specifying the timeframe for submission of a Tile V permit were removed since the Title V application was received on August 14, 2017.

# Section D

Source ID 110

References were changed to that of 40 CFR Part 60 Subpart XXX without any change in requirements:

Condition #009 (b) Condition #010 Condition #011 Condition #019 Condition #025 [#027] Condition #026 [#028]

References were changed to that of 40 CFR Part 60 Subpart XXX in the following conditions, which also had additional changes as noted below.

#002 #003 #004 #005 #008 #012 #015 #020 #021 #024 [026] #027 [#029] #031 [#032]

Condition #001

For clarity and emphasis, a note "Point sources are not included in this total" was added to the condition specifying the fugitive VOC





09-00210

#### limit for the Fairless landfill.

### Condition #002 (1)

The requirement to submit a revised Gas Collection and Control System (GCCS) Plan prior installing or expanding the gas collection system in a way that was not previously described in the GCCS plan was included, since the initial GCCS plan was submitted on February 14, 2017, and noted as such in the condition. The requirement to submit a GCCS plan within a year of the effective date of the Plan Approval was removed, since the requirement has been met.

The requirement of 40 CFR Section 60.767(d)(1) for the permittee to submit a revised GCCS plan within 90 days in advance of any expansions, not previously approved by a GCCS plan, was included in the Condition.

#### Condition #002(1)(A)

.Requirements for the Gas Collection and Control System were moved to Section (1)(A) from Section (3) of Condition (2) for clarity.

#### Condition #002(D)

\*Paragraph 40 CFR Section 60.767(c)(6), which allows the permittee to implement a proposed design plan for the landfill, if the Administrator does not approve the Plan or ask questions within 90 days of submission, was included.

\*The Note " the Department reserves the right to re-evaluate the adequacy of the GCCS design plan" was removed. DEP can reevaluate the GCCS design plan as part of the compliance provisions in 40 CFR Section 60.765.

#### Condition #003

The following changes were made, in accordance with the applicability of 40 CFR Subpart XXX over Subpart WWW.

(a) Nitrogen and oxygen required levels were removed.

(b) Alternate time lines and gas control system expansion in response to inability to correct exceedances of temperature standards were replaced with root cause analysis, corrective action analysis, and implementation schedule and associated recordkeeping and reporting.

(c) Supporting data for a higher operating temperature demonstration must show that the higher value neither causes fires nor kills methanogens (rather than either does not cause fires or doesn't kill methanogens.)

#### Condition #004

The following change was made, in accordance with the applicability of 40 CFR Subpart XXX over Subpart WWW. In (c)(i) methane concentration was added to the required monitoring recordkeeping, in addition to location.

### Condition #005

Expansion of the gas collection system for exceedances of pressure within 120 days if exceedances cannot be corrected with 15 days and alternate timeline proposals were replaced with root cause analysis, corrective action analysis, and implementation schedule and associated recordkeeping and reporting.

# Condition #007

Slip-wells were added to the components which may comprise the interim gas collection and control system as these were identified as components of the interim GCCS in the GCCS Plans, received by the Department on February 14, 1027 and November 6, 2018.

#### Condition #008

\*The wording "unless modified by Plan approval" was added to the acceptable destinations for the landfill gas collected, since Waste Management is in transition over the end user for the landfill gas.

\*examples of benefial uses were added from 40 CFR Section 60.762(b)(2)(iii)(C)

\*Source ID C11 was removed from the list of acceptable destinations, since this flare has not yet been constructed.

\*Paragraph (d) pertaining to identifying the dominant end-user of the landfill as someone other than the permittee, was removed since Waste Management is in transition over the end user of the landfill gas.

\*The ULE flares (Plan Approval 09-0210B) were added as an acceptable destination for the landfill gas.

#### Condition #012

The following changes were in response to 40 CFR Part 60 Subpart XXX

(a) The phrase "and all cover penetrations" was added to the end of the first sentence. Also, a clarifying sentence was added indicating that surface monitoring is required wherever there is an opening in the landfill where waste was placed and a gas collection and control system is required.

(b) (i), (iii), (iv) For the portable analyzer used in surface scans, the methodology, the instrument specifications, and the calibration





09-00210

procedures were updated to Section 6 (rather than Section 3) of Method 21, Section 8.1 (rather than Section 3.1.3) of Method 21, and Sections 8 and 10 (rather than Section 4.1) of Method 21 of Appendix A of 40 CFR Part 60.

(d) Surface monitoring methodology was updated to Section 8.3.1 (rather than Section 4.3.1) of Method 21 of Appendix A of 40 CFR Part 60.

Condition #013

In response to 40 CFR Part 60 Subpart XXX, the following conditions were added.

\*an annual calibration for the wellhead temperature measuring device

\*ASTM D6522-11 as an acceptable methodology for oxygen determination

\*In addition, a note was included indicating that the oxygen or nitrogen need only to be monitored - the wells do not need to be adjusted to meet oxygen or nitrogen standards.

Condition #015

(a) Design capacity report was added to the required recordkeeping.

\*In response to 40 CFR Part 60 Subpart XXX, the following recordkeeping was added:

\*Exceedances of the wellhead temperature standard, wellhead nitrogen at or above 20 percent and wellhead oxygen readings at or above 5 percent

\*root cause analyses and related corrective actions, schedules and other related data

#### Condition #018

The condition was removed as Waste Management has completed all the required capacity and startup notices in the condition.

#### Condition #020

\*In response to the requirements of 40 CFR Part 60 Subpart XXX, the reporting condition for the equipment removal report was revised to account for submission of the original performance test and rate tests through EPA's CDX reporting system, as provided by 40 CFR Part 60 Subpart XXX. If the test reports were originally submitted through the CDX, only the dates have to be submitted with the equipment removal report.

\*40 CFR Section 60.767(2) was added, which indicates that the Administrator may request more information to assure that the equipment removal conditions have been met.

# Condition #21

+In response to the requirements of 40 CFR Part 60 Subpart XXX in Section 60.767(g) the following changes or additions were made:

\* All instances of landfill gas collection system non-operation must be reported not only instances of more than 5 days.

\* Reporting was added for any corrective action analysis that takes more than 60 days to correct an exceedance, to include the root cause analysis, description of corrective actions, date, the parameter reading and a schedule

\* The location of the surface methane exceedances must be determined with an instrument of an accuracy of at least 4 meters. The co-ordinates must be in decimal degrees with at least 5 decimal places.

+A note was included indicating that nitrogen or oxygen wellhead concentration do not require corrective actions or reporting thereof to meet operational standards.

Condition #024 [#026]

In response to the requirements of 40CFR Part 60 Subpart XXX, the following changes were made.

\* Upon demonstration, an allowance for the lack of ability to operate the gas collection and control system for a minimum of 15 years was included in the condition.

\*NMOC emission rate was revised to 34 Megagrams per year, from 50 Megagrams per year.

\*In addition, paragraph (b)(ii), giving DEP authority to assure compliance with the Pa. Air Pollution Control Act, was removed. Sufficient authority for DEP to assure compliance with the Air Pollution Control Act is given in Section B Condition #008.

# Condition #027 [#029]

The requirement that maximum gas flow rate for new GCCS systems must be in compliance with 40 CFR Section 60.765(a)(1) was added to the condition specifying construction of the GCCS.

Condition #030





The condition providing submittal addresses was removed since it is redundant with Section C Condition #018.

### Condition #031 [#032]

In response to the applicability of 40 CFR Part 60 Subpart XXX, the condition was changed to state that the provisions of 40 CFR Part 60 Subpart XXX apply, rather than do not apply as stated in 40 CFR Part 60 Subpart WWW (Section 60.755(e)), during periods of startup, shutdown and malfunction. During periods of startup, shutdown and malfunction, work practices of Section 60.763(e), pertaining to shutdown of the all valves venting to the atmosphere, shall be followed rather than the operational standards of 40 CFR Section 60.765.

New Recordkeeping condition, in response to applicability of 40 CFR Part 60 Subpart XXX: Requirements were added for monitoring and recording of bypasses of the treatment system as well as parameters that would assure optimal operation of the landfill gas treatment system.

New Reporting Condition, in response to the applicability of 40 CFR Part 60 Subpart XXX:

Pursuant to 40 CFR Section 60.767(j), the permittee must submit reports to the Administrator for corrective actions required by 40 CFR 60.765(a)(3)(iii) or (a)(5)(iii) no later than 75 days after the first exceedance of pressure or temperature (1) If expected to take longer than 120 days

(2) If not completed in 60 days.

New Reporting Condition in response to 40 CFR Part 60 Subpart XXX: The procedure for submission of reports through CEDRI was included.

#### Source ID C10, C11

Conditions for Sources C10 and C11 were included as a group (Section E:Flares). Language was added to conditions, indicating when conditions applied individually to each flare or when as a combination of both flares. Notation was included that C11 is to be constructed under Plan Approval 09-0210A and the conditions will apply when installed.

Condition #001(b)

The phrase "to be installed under Plan Approval 09-0210A" was included with Source ID C11 in this condition indicating the combined C10 and C11 emission limits.

#002 Since operations at the facility are in transition, due to the loss or change in end user, a condition was included that the flare may have additional uses or fuel sources as defined by Plan Approval.

Condition #004

The citation was revised to 40 CFR Section 60.762(b)(2)(iii)(B) due to the applicability of Subpart XXX.

Condition #005

The stack testing condition was revised to the standard DEP once in 5 years test condition, which includes 90 days pre-test for protocols.

#### Condition #007

The condition requesting testing document submittal through www.depgreenport.state.pa.us was deleted since it is no longer envisioned that the greenport site will become available.

# Additional Testing Condition

New Department submission requirements for testing documents to the Regional Office and the Department's Central Office were included in a condition. Condition #006 was deleted since its requirements are included in the new condition.

#### Conditions #009, #013

A phrase is included indicating that emissions from the combination of flares C10 and C11 are to be calculated and recorded when C11 is installed.

Condition #009(c)

A notation is included with Source ID C11, indicating that it is not yet installed.

### Condition #007





09-00210

\*Changes were made in accordance with 40 CFR Section 60.766(b)(2)(i) and (ii), that both the gas flow meter must be provided for flow to the flare and the flare bypass line must be secured.

\*The requirement of 40 CFR Part 60 Subpart XXX to visually inspect the seal or closure mechanism of the bypass line valve monthly to ensure that the valve is in the closed position.

Condition #012 [#011] The condition was clarifed by including the name of the Section (Section E : Group Name:Flares).

Condition #018(b) [#017(b)] The flare temperature is changed to a minimum of 1547°F, based on the performance testing for flare C10.

Condition #20 [#019] The model designation and serial number of the flare were included in the identifying condition.

Condition #21 [#020]

The condition was changed to the requirements of 40 CFR Section 60.763(e), which requires that during periods of startup, shutdown and malfunction, that the work practices of Section 60.763(e), pertaining to shutdown of the all valves venting to the atmosphere, shall be followed.

# Additional Additional Requirements Condition

A note was added indicating that flare C11 was authorized by Plan Approval 09-0210A, but has not yet been installed. Plan Approval 09-0210A and its extensions describe conditions for C11 until completion of construction and incorporation in the Operating Permit.

Source ID 500

Condition #011 (09-00007) The condition was revised to take into account the vacatur of May 2, 2016.

# Section G

Sources associated with the Leachate Treatment System in the GROWS permit, 09-00007, were moved to Section H of the Fairless Operating Permit.





\*\*\*\*\*\* End of Report \*\*\*\*\*\*