



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY PROGRAM

PLAN APPROVAL

Issue Date: August 20, 2024

Effective Date: August 20, 2024

Expiration Date: August 20, 2027

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 construct, install, modify or reactivate the air emission source(s) more fully described in the site inventory list. This Facility is subject to all terms and conditions specified in this plan approval. Nothing in this plan approval 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 plan approval condition is set forth in brackets. All terms and conditions in this permit are federally enforceable unless otherwise designated as "State-Only" requirements.

Plan Approval No. 09-0210C

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

Owner Information

Name: WASTE MGMT OF FAIRLESS LLC

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

Email: bjones5@wm.com

Plan Approval Contact Person

Name: BRIAN P BOLVIN PE

Title: SITE ENGR

Phone: (215) 428 - 4384

Email: bbolvin@wm.com

[Signature] _____

JAMES D. REBARCHAK, SOUTHEAST REGION AIR PROGRAM MANAGER

**Plan Approval Description**

A plan approval to increase the capacity of the MSW landfill, Source ID 110, as follows:

Existing	Expansion	Total
47.4	27.18	74.58 million bank cubic yards
27.9	20.51	48.41 tons of MSW



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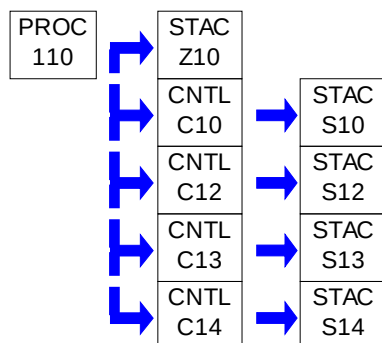
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**SECTION A. Plan Approval Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
110	MSW LANDFILL - FAIRLESS		
C10	BACK-UP ENCLOSED FLARE FAIRLESS 1	300.000 MCF/HR	LANDFILL GAS
C12	ENCLOSED ULE FLARE 1		
C13	ENCLOSED ULE FLARE 2		
C14	ENCLOSED ULE FLARE 3		
S10	BACK-UP ENCLOSED FLARE (C10) STACK		
S12	ENCLOSED ULE FLARE STACK 1 (C100)		
S13	ENCLOSED ULE FLARE STACK 2 (C120)		
S14	ENCLOSED ULE FLARE STACK 3 (C140)		
Z10	FACILITY FUGITIVES - FAIRLESS		

PERMIT MAPS

**SECTION B. General Plan Approval Requirements****#001 [25 Pa. Code § 121.1]****Definitions**

Words and terms that are not otherwise defined in this plan approval 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 § 127.12b (a) (b)]**Future Adoption of Requirements**

The issuance of this plan approval does not prevent the future adoption by the Department of any rules, regulations or standards, or the issuance of orders necessary to comply with the requirements of the Federal Clean Air Act or the Pennsylvania Air Pollution Control Act, or to achieve or maintain ambient air quality standards. The issuance of this plan approval shall not be construed to limit the Department's enforcement authority.

#003 [25 Pa. Code § 127.12b]**Plan Approval Temporary Operation**

This plan approval authorizes temporary operation of the source(s) covered by this plan approval provided the following conditions are met.

(a) When construction, installation, modification, or reactivation is being conducted, the permittee shall provide written notice to the Department of the completion of the activity approved by this plan approval and the permittee's intent to commence operation at least five (5) working days prior to the completion of said activity. The notice shall state when the activity will be completed and when the permittee expects to commence operation. When the activity involves multiple sources on different time schedules, notice is required for the commencement of operation of each source.

(b) Pursuant to 25 Pa. Code § 127.12b (d), temporary operation of the source(s) is authorized to facilitate the shakedown of sources and air cleaning devices, to permit operations pending the issuance of a permit under 25 Pa. Code Chapter 127, Subchapter F (relating to operating permits) or Subchapter G (relating to Title V operating permits) or to permit the evaluation of the air contaminant aspects of the source.

(c) This plan approval authorizes a temporary operation period not to exceed 180 days from the date of commencement of operation, provided the Department receives notice from the permittee pursuant to paragraph (a), above.

(d) The permittee may request an extension of the 180-day shakedown period if further evaluation of the air contamination aspects of the source(s) is necessary. The request for an extension shall be submitted, in writing, to the Department at least 30 days prior to the end of the initial 180-day shakedown period and shall provide a description of the compliance status of the source, a detailed schedule for establishing compliance, and the reasons compliance has not been established. This temporary operation period will be valid for a limited time and may be extended for additional limited periods, each not to exceed 180 days.

(e) The notice submitted by the permittee pursuant to subpart (a) above, prior to the expiration of the plan approval, shall modify the plan approval expiration date on Page 1 of this plan approval. The new plan approval expiration date shall be 180 days from the date of commencement of operation.

#004 [25 Pa. Code § 127.12(a) (10)]**Content of Applications**

The permittee shall maintain and operate the sources and associated air cleaning devices in accordance with good engineering practice as described in the plan approval application submitted to the Department.

#005 [25 Pa. Code §§ 127.12(c) and (d) & 35 P.S. § 4013.2]**Public Records and Confidential Information**

(a) The records, reports or information obtained by the Department or referred to at public hearings shall be available to the public, except as provided in paragraph (b) of this condition.

(b) Upon cause shown by the permittee that the records, reports or information, or a particular portion thereof, but not emission data, to which the Department has access under the act, if made public, would divulge production or sales figures or methods, processes or production unique to that person or would otherwise tend to affect adversely the

**SECTION B. General Plan Approval Requirements**

competitive position of that person by revealing trade secrets, including intellectual property rights, the Department will consider the record, report or information, or particular portion thereof confidential in the administration of the act. The Department will implement this section consistent with sections 112(d) and 114(c) of the Clean Air Act (42 U.S.C.A. § § 7412(d) and 7414(c)). Nothing in this section prevents disclosure of the report, record or information to Federal, State or local representatives as necessary for purposes of administration of Federal, State or local air pollution control laws, or when relevant in a proceeding under the act.

#006 [25 Pa. Code § 127.12b]**Plan Approval terms and conditions.**

[Additional authority for this condition is derived from 25 Pa. Code Section 127.13]

(a) This plan approval will be valid for a limited time, as specified by the expiration date contained on Page 1 of this plan approval. Except as provided in § § 127.11a and 127.215 (relating to reactivation of sources; and reactivation), at the end of the time, if the construction, modification, reactivation or installation has not been completed, a new plan approval application or an extension of the previous approval will be required.

(b) If construction has commenced, but cannot be completed before the expiration of this plan approval, an extension of the plan approval must be obtained to continue construction. To allow adequate time for departmental action, a request for the extension shall be postmarked at least thirty (30) days prior to the expiration date. The request for an extension shall include the following:

- (i) A justification for the extension,
- (ii) A schedule for the completion of the construction

If construction has not commenced before the expiration of this plan approval, then a new plan approval application must be submitted and approval obtained before construction can commence.

(c) If the construction, modification or installation is not commenced within 18 months of the issuance of this plan approval or if there is more than an 18-month lapse in construction, modification or installation, a new plan approval application that meets the requirements of 25 Pa. Code Chapter 127, Subchapter B (related to plan approval requirements), Subchapter D (related to prevention of significant deterioration of air quality), and Subchapter E (related to new source review) shall be submitted. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified.

#007 [25 Pa. Code § 127.32]**Transfer of Plan Approvals**

(a) This plan approval may not be transferred from one person to another except when a change of ownership is demonstrated to the satisfaction of the Department and the Department approves the transfer of the plan approval in writing.

(b) Section 127.12a (relating to compliance review) applies to a request for transfer of a plan approval. A compliance review form shall accompany the request.

(c) This plan approval is valid only for the specific source and the specific location of the source as described in the application.

#008 [25 Pa. Code § 127.12(4) & 35 P.S. § 4008 & § 114 of the CAA]**Inspection and Entry**

(a) 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.

(b) The permittee shall also allow the Department to have access at reasonable times to said sources and associated air cleaning devices with such measuring and recording equipment, including equipment recording visual observations, as the Department deems necessary and proper for performing its duties and for the effective enforcement of the Air Pollution Control Act and regulations adopted under the act.

**SECTION B. General Plan Approval Requirements**

(c) Nothing in this plan approval condition shall limit the ability of the Environmental Protection Agency to inspect or enter the premises of the permittee in accordance with Section 114 or other applicable provisions of the Clean Air Act.

#009 [25 Pa. Code 127.13a]**Plan Approval Changes for Cause**

This plan approval may be terminated, modified, suspended or revoked and reissued if one or more of the following applies:

- (a) The permittee constructs or operates the source subject to the plan approval in violation of the act, the Clean Air Act, the regulations promulgated under the act or the Clean Air Act, a plan approval or permit or in a manner that causes air pollution.
- (b) The permittee fails to properly or adequately maintain or repair an air pollution control device or equipment attached to or otherwise made a part of the source.
- (c) The permittee fails to submit a report required by this plan approval.
- (d) The Environmental Protection Agency determines that this plan approval is not in compliance with the Clean Air Act or the regulations thereunder.

#010 [25 Pa. Code §§ 121.9 & 127.216]**Circumvention**

- (a) The permittee, 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 plan approval, 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.

#011 [25 Pa. Code § 127.12c]**Submissions**

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

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

#012 [25 Pa. Code § 127.12(9) & 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 facility. The permittee shall submit the RMP to the Environmental Protection Agency according to the following schedule and requirements:

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

**SECTION B. General Plan Approval Requirements**

- (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 the Environmental Protection Agency 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 plan approval 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.

#013 [25 Pa. Code § 127.25]**Compliance Requirement**

A person may not cause or permit the operation of a source subject to § 127.11 (relating to plan approval requirements), unless the source and air cleaning devices identified in the application for the plan approval and the plan approval issued to the source, are operated and maintained in accordance with specifications in the application and conditions in the plan approval issued by the Department. A person may not cause or permit the operation of an air contamination source subject to this chapter in a manner inconsistent with good operating practices.

**SECTION C. Site Level Plan Approval Requirements****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**

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

- (1) Construction or demolition of buildings or structures.
- (2) Grading, paving and maintenance of roads and streets.
- (3) 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.

(4) Clearing of land.

(5) Stockpiling of materials.

(6) Open burning operations, as specified in 25 Pa. Code § 129.14.

(7) N/A

(8) N/A

(9) Sources and classes of sources other than those identified in (1)-(8) of this condition, for which the permittee has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:

(i) The emissions are of minor significance with respect to causing air pollution; and

(ii) 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) (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 any of the following instances:

(a) When the presence of uncombined water is the only reason for failure of the emission 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.

**SECTION C. Site Level Plan Approval Requirements**

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

007 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

(a) Total particulate matter emissions, including both point source and fugitive emissions, from the Fairless Landfill and the GROWS/GROWS North Landfill (TVOP 09-0007) 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

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 §127.12b]****Plan approval terms and conditions.**

(a) If at any time the Department has cause to believe that air contaminant emissions from any source may be in excess of the limitations specified in this Permit/Plan Approval, 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, the most current version of the DEP Source Testing Manual, and the EPA Clean Air Act National Stack Testing Guidance, 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:

**SECTION C. Site Level Plan Approval Requirements**

- (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 §127.12b]**Plan approval terms and conditions.**

(a) The permittee shall calculate emissions of the following pollutants from each of the 3 landfills (Fairless TVOP 09-00210; GROWS and GROWS North TVOP 09-00007) 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 §127.12b]**Plan approval 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 §127.12b]****Plan approval 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.

**SECTION C. Site Level Plan Approval Requirements****# 014 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) The permittee shall keep records of the emissions of the following pollutants from each of the 3 landfills (Fairless TVOP 09-00210; GROWS and GROWS North TVOP 09-00007) 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 §127.12b]**Plan approval 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 §127.12b]****Plan approval terms and conditions.**

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

The permittee shall submit the following:

(a) An annual certificate of compliance, due by April 1st of each year, for the period covering January 1 through December 31 of the previous year. This certificate 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 certificate of compliance shall be submitted to DEP electronically, and to EPA Region III in electronic form at the following email address: R3_APD_Permits@epa.gov. The subject line shall read: "TVOP No. 09-02100, Waste Management Fairless."

(b) A semi-annual deviation report to DEP, 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 §127.12b]**Plan approval terms and conditions.**

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

(a) Regional Air Program Manager

**SECTION C. Site Level Plan Approval Requirements**

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

and

(b) Enforcement & Compliance Assurance Division
Air, RCRA and Toxics Branch (3ED21)
Four Penn Center
1600 John F. Kennedy Boulevard
Philadelphia, PA 19103-2852

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 §127.12b]**Plan approval 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.

**SECTION C. Site Level Plan Approval Requirements****# 019 [25 Pa. Code §135.3]****Reporting**

If the permittee has been previously advised by the Department to submit a source report, the permittee shall submit by March 1, of each year, a source report for the preceding calendar year. The report shall include information from all 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, including those sources listed in the Miscellaneous Section of this permit.

The permittee may request an extension of time from the Department for the filing of a source report, and the Department may grant the extension for reasonable cause.

VI. WORK PRACTICE REQUIREMENTS.**# 020 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

Nothing in this plan approval 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, monitoring, recordkeeping or reporting provisions of 40 CFR Sections 60.763 through 60.768, (found under Section D) as restated or incorporated herein.

021 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The permittee shall ensure that the source(s) and air pollution control device(s), listed in this plan approval, are operated and maintained in a manner consistent with good operating and maintenance practices, and in accordance with manufacturer's specifications

022 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

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 this plan approval, 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

023 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

[Additional authority for this 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), of Section B, of this permit.

024 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The permittee shall comply with all of the existing requirements of its current Title V permit, No. 09-00210, unless specifically revised in this plan approval.

VII. ADDITIONAL REQUIREMENTS.**# 025 [25 Pa. Code §127.12b]****Plan approval 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 and GROWS North Landfills (Title V Operating Permit No. 09-00007), (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:

**SECTION C. Site Level Plan Approval Requirements**

- (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.

026 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

(a) The permittee has exercised the option under 40 CFR § 60.762(b)(2)(iv) to comply with the requirements of 40 CFR §§ 63.1958, 63.1960, and 63.1961 in 40 CFR Part 63 Subpart AAAA in lieu of the requirements of 40 CFR §§ 60.763, 60.765 and 60.766 in 40 CFR Part 60 Subpart XXX for the operation of the landfill gas collection and control system (GCCS). Once the permittee begins complying with the provisions under 40 CFR Part 63 Subpart AAAA, they may not return to the provisions under 40 CFR Part 60 Subpart XXX for the GCCS operation.

(b) The listed sections of 40 CFR Part 63 Subpart AAAA are not inclusive of all changes required as part of compliance option. The permittee is responsible for compliance with all provisions under 40 CFR Part 63 Subpart AAAA that have been referred to under 40 CFR Part 60 Subpart XXX as a result of the use of the compliance option under § 60.762(b)(2)(iv).

(c) The permittee shall follow all monitoring, reporting, recordkeeping and work practices required under 40 CFR §§ 63.1958, 63.1960, and 63.1961 in lieu of requirements under 40 CFR §§ 60.763, 60.765 and 60.766. This includes but is not limited to:

- (i) Operating with a wellhead temperature of less than 145°F (62.8°C)
- (ii) Enhanced monitoring requirements under § 63.1961(a)(5)
- (iii) Special requirements for wellhead temperatures over 165°F (73.9°C) under § 63.1961(a)(6) and over 170°F (76.7°C) under § 63.1960(a)(4)(i)(D)
- (iv) Recording of location data for exceedances of 500 ppm above background methane exceedances as described in § 63.1960(c)(4)
- (v) Submitting semi-annual reports as described in § 63.1981(h)

(d) All other applicable parts of 40 CFR Part 60 Subpart XXX of the Standards of Performance for New Stationary Sources (NSPS) not subject to opt-in under 40 CFR § 60.762(b)(2)(iv) still apply. Applicable parts 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) apply to this facility.

VIII. COMPLIANCE CERTIFICATION.

No additional compliance certifications exist except as provided in other sections of this plan approval including Section B (relating to Plan Approval General Requirements).

IX. COMPLIANCE SCHEDULE.

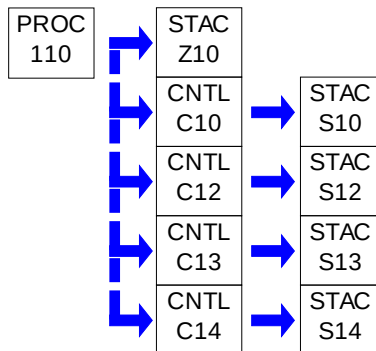
No compliance milestones exist.

**SECTION D. Source Level Plan Approval Requirements**

Source ID: 110

Source Name: MSW LANDFILL - FAIRLESS

Source Capacity/Throughput:

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

Fugitive emissions of Volatile Organic Compounds (VOC) from the Fairless Landfill shall not exceed 39.6 tons on a 12-month rolling basis, 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 §127.12b]**Plan approval 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); and 63.1958]

(a) 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 (b)(i) through (iii).

(b) 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.

(i) 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.

(1) 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;

(2) 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.

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

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

(ii) 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.

(iii) 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

**SECTION D. Source Level Plan Approval Requirements**

provisions to 40 CFR Section 60.769.

(iv) The Department shall review the information submitted under paragraphs (i), (ii), and (iii) 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.

(c) 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.

(d) 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.

(e) 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 §127.12b]
Plan approval 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); 63.1958(c); and 63.1960(a)(4)]

(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 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).

(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 40 CFR §60.767(g)(7) as part of the next annual report. The owner or operator must keep records according to 40 CFR §60.768(e)(4).

(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 §60.767(g)(7) and §60.767(j). The owner or operator must keep records according to 40 CFR §60.768(e)(5) .

(c) If corrective actions are taken pursuant to paragraph (b) of this condition and 40 CFR Section 60.765, the monitored

**SECTION D. Source Level Plan Approval Requirements**

exceedance is not a violation of the operational requirements in 40 CFR Section 60.763 or paragraph (a) of this condition.

[Note: The requirements under 40 CFR §§ 60.763, 60.765 and 60.766 for the operation of the GCCS have been replaced by the operational requirements under 40 CFR §§ 63.1958, 63.1960, and 63.1961 as allowed by 40 CFR § 60.762(b)(2)(iv). Refer to Section C, Condition #026 for further information.]

004 [25 Pa. Code §127.12b]**Plan approval 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 permittee shall conduct monitoring pursuant to 40 CFR Sections 60.763(d), 60.765(c) and (d), and Condition #014 for this source.

(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) (paragraph (c)(v) of this Condition) 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) 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) (paragraphs (c)(ii) or (c)(iii) of this Condition) shall be re-monitored 1 month from the initial exceedance. If the 1-month re-monitoring shows a concentration less than 500 parts per million above background, no further monitoring of that location is required until the next quarterly monitoring period. If the 1-month re-monitoring shows an exceedance, the actions specified in paragraph 40 CFR Section 60.755 (c)(4) (iii) or (v) (paragraph (c)(iii) or (c)(v) of this Condition) 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.

[Note: The requirements under 40 CFR §§ 60.763, 60.765 and 60.766 for the operation of the GCCS have been replaced by the operational requirements under 40 CFR §§ 63.1958, 63.1960, and 63.1961 as allowed by 40 CFR § 60.762(b)(2)(iv). Refer to Section C, Condition #026 for further information.]

005 [25 Pa. Code §127.12b]**Plan approval 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).]

**SECTION D. Source Level Plan Approval Requirements**

(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 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).

(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 40 CFR §60.767(g)(7) as part of the next annual report. The owner or operator must keep records according to 40 CFR §60.768(e)(4).

(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) and 60.767(j). The owner or operator must keep records according to 40 CFR §60.768(e)(5).

(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.

[Note: The requirements under 40 CFR §§ 60.763, 60.765 and 60.766 for the operation of the GCCS have been replaced by the operational requirements under 40 CFR §§ 63.1958, 63.1960, and 63.1961 as allowed by 40 CFR § 60.762(b)(2)(iv). Refer to Section C, Condition #026 for further information.]

006 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

(a) There shall be no landfill gas leaks which result in concentrations of 500 ppmv or more, measured as propane (or 1375 ppmv, or more, measured as methane), at a distance of 0.5 inches above the surface of any positive pressure LFG collection and treatment equipment at the facility. Non-repeatable and momentary readings shall not be considered to be leaks, nor should measurements taken during routine equipment maintenance.

(i) Routine equipment maintenance includes, but is not limited to, the following:

- (1) Gas piping repair;
- (2) Flare station blower repair or replacement;

**SECTION D. Source Level Plan Approval Requirements**

- (3) Flare relight system testing or repair;
- (4) Flare thermocouple or temperature switch repair or replacement;
- (5) Flare liner inspection, repair, or replacement;
- (6) Flare actuator valve repair or replacement;
- (7) Flare flame arrestor basket cleaning;
- (8) Flare control panel timer adjustment or replacement;
- (9) Condensate trap pump repair or replacement;
- (10) Condensate pump pump-outs;
- (11) Electrical service repairs; and
- (12) Other repairs as determined by DEP

(b) Equipment fully contained within the cap and sections of equipment below the landfill cap are not subject to this requirement.

(c) Equipment fully enclosed in a building using methane monitors is not subject to this requirement.

(d) The landfill equipment subject to this requirement includes gas extraction equipment designed to operate under positive pressure. This includes the blower, the control device or treatment system, above ground piping connecting these components and applicable fittings and valves.

(e) Equipment subject to this conditions found to have LFG leaks exceeding the 500 ppmv as propane (or 1375 ppmv, or more, measured as methane) shall be repaired in a timely manner but no later than 15 days after detection. If a repair cannot be made within 15 days of detection, the permittee shall report the inability to repair in 15 days to the Department. The report shall contain the following:

- (i) Location and description of leaking equipment
- (ii) Reason for delay in repair
- (iii) An estimated date the repair should be completed by

Throughput Restriction(s).

007 [25 Pa. Code §127.12b]
Plan approval terms and conditions.

(a) 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.

(b) The Fairless Landfill shall be limited to a maximum disposal volume of 74.58 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 48.41 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).

008 [25 Pa. Code §127.12b]
Plan approval 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.

- (i) The permittee may use other temporary measures such as horizontal collectors, temporary vertical gas wells and slip

**SECTION D. Source Level Plan Approval Requirements**

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 development.

(ii) 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 managed in accordance with Condition #009 for this source (Source ID 110).

(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.

009 [25 Pa. Code §127.12b]
Plan approval 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), (iii), or (iv) 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. Source ID C10 is authorized to operate until it is decommissioned as required under Plan Approval 09-0252A. Testing is required if operated beyond 12/31/2024 as set forth in Section D, Source ID C10, Condition #005.

(ii) The renewable natural gas (RNG) plant, as permitted under Plan Approval 09-0252A.

(iii) 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)(iv).

(iv) 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. Efforts to repair the collection or control system must be initiated and completed in a manner such that downtime is kept to a minimum, and the collection and control system must be returned to operation.

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

**SECTION D. Source Level Plan Approval Requirements****II. TESTING REQUIREMENTS.****# 010 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) The permittee shall test the landfill gas for NMOC content using EPA Method 25C or other method approved by the Department. The landfill gas shall be taken at a point in the GCCS system where the landfill gas is a blend of gas collected from all sections of the landfill. For any approved method, sample must take place before condensate removal system. Results shall be reported in ppmv as hexane and corrected for air infiltration.

(b) Testing shall be done on an annual basis except if results from two consecutive annual test differ by less than 10%, testing may be reduced to every 5 years.

(c) The permittee may opt to use the NMOC content from the latest edition of the EPA AP-42, Chapter 2.4 for MSW landfills in place of testing. The permittee must inform the Department in writing if using this option.

III. MONITORING REQUIREMENTS.**# 011 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) The permittee shall demonstrate annually the site-specific 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 L_0 , equal to 169.9 m³/Mg (Mega gram) of solid waste. For the NMOC concentration, the permittee may use the NMOC concentration from testing performed as described in Condition #010 for this source or the latest edition of EPA AP-42, Chapter 2.4 for MSW landfills. The permittee shall inform the Department which method of NMOC concentration determination was used for calculations.

(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).

012 [25 Pa. Code §127.12b]**Plan approval 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.

**SECTION D. Source Level Plan Approval Requirements****# 013 [25 Pa. Code §127.12b]****Plan approval 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.

014 [25 Pa. Code §127.12b]**Plan approval 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); and 63.1958]

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 cover penetrations or 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 survey.

(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) The permittee shall determine and record the latitude and longitude coordinates of each exceedance using an instrument with an accuracy of at least 4 meters. The coordinates must be in decimal degrees with at least five decimal places as required under 40 CFR § 63.1958(d)(2)(iii).

(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 monitored exceedance of 500 ppm standard for three consecutive quarterly monitoring periods.

[Note: The requirements under 40 CFR §§ 60.763, 60.765 and 60.766 for the operation of the GCCS have been replaced by the operational requirements under 40 CFR §§ 63.1958, 63.1960, and 63.1961 as allowed by 40 CFR § 60.762(b)(2)(iv).

**SECTION D. Source Level Plan Approval Requirements**

Refer to Section C, Condition #026 for further information.]

015 [25 Pa. Code §127.12b]**Plan approval 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 measuring device, or an access port for temperature measurements installed at each wellhead to determine compliance with the operating parameters pursuant to 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 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) 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 ± 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).

[Note: The requirements under 40 CFR §§ 60.763, 60.765 and 60.766 for the operation of the GCCS have been replaced by the operational requirements under 40 CFR §§ 63.1958, 63.1960, and 63.1961 as allowed by 40 CFR § 60.762(b)(2)(iv). Refer to Section C, Condition #026 for further information.]

016 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

(a) The positive pressure LFG collection and treatment equipment at the facility shall be monitored once per quarter for LFG leaks. Equipment may be divided into sections or groups for monitoring to allow monitoring to be completed over multiple days as long as the time period between monitor events for the section or group does not exceed 90 days.

(b) The quarterly monitoring shall include all joints, flanges, and connections on positive pressure LFG collection and treatment equipment. For positive pressure pipes, the monitoring shall be done at every 10 ft increment for pipes longer than 10 ft and at the midpoint of pipes less than 10 ft.

**SECTION D. Source Level Plan Approval Requirements**

(c) Any positive pressure LFG collection and control equipment showing signs of damage, including but not limited to cracking, discoloration, or warpage, shall be monitored as soon as practical after discovery of damage.

(d) If equipment is divided into sections or groups for monitoring, the permittee shall provide the Department a description of each section or group and figures demonstrating the location of each section or group.

IV. RECORDKEEPING REQUIREMENTS.**# 017 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) The permittee shall calculate and record the monthly and 12-month rolling average VOC emissions from the Fairless Landfill, using Department approved methods and the latest edition of AP-42 Chapter 2.4.

(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.

018 [25 Pa. Code §127.12b]**Plan approval 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), 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 40 CFR Section 60.763 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 oxygen level at or above 5 percent.

(f) Pursuant to 40 CFR Section 60.768(e)(3), (4) and (5), the permittee shall keep:

**SECTION D. Source Level Plan Approval Requirements**

(i) For any root cause analysis for which corrective actions are required in 40 CFR §60.765(a)(3)(i) or (a)(5)(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 40 CFR §60.765(a)(3)(ii) or (a)(5)(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 40 CFR §60.765(a)(3)(iii) or (a)(5)(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.

[Note: The requirements under 40 CFR §§ 60.763, 60.765 and 60.766 for the operation of the GCCS have been replaced by the operational requirements under 40 CFR §§ 63.1958, 63.1960, and 63.1961 as allowed by 40 CFR § 60.762(b)(2)(iv). Refer to Section C, Condition #026 for further information.]

019 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

[Authority for this permit condition is also from 40 CFR Sections 60.768 (b)(5) and 63.1983(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 end use of the treated 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.

020 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

(a) The facility shall keep records of LFG leaks and monitoring for positive pressure LFG collection and treatment equipment. Records shall include at a minimum:

1. All readings taken during quarterly monitoring and damaged equipment monitoring.
2. Descriptions and figures of equipment divisions or groups.

**SECTION D. Source Level Plan Approval Requirements**

3. Any repairs performed.
4. Any reports submitted for repairs not completed within 15 days of discovery.

021 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

(a) The permittee shall maintain records of landfill gas testing for NMOC and shall use the results in calculating the VOC emissions from the landfill.

(b) If the permittee opted to use NMOC content from the latest edition of the EPA AP-42, Chapter 2.4 for MSW landfills, then the AP-42 data must be used in calculating the VOC emissions from the landfill.

V. REPORTING REQUIREMENTS.**# 022 [25 Pa. Code §127.12b]****Plan approval 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).

023 [25 Pa. Code §127.12b]**Plan approval 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 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.

024 [25 Pa. Code §127.12b]**Plan approval 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 40 CFR §60.762(b)(2) using an active collection system designed in accordance with 40 CFR §60.762(b)(2)(ii) must submit to the Administrator, following the procedure specified in 40 CFR Section 60.767(i)(2), annual reports of the recorded information in paragraphs (a) through (h).

**SECTION D. Source Level Plan Approval Requirements**

(a) value and length of time for exceedance of applicable parameters monitored, that is the gauge pressure in the gas collection header and the temperature of the landfill gas pursuant to 40 CFR Section 60.766(a);

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 Permit 09-00210, Section E- Group Name: Flares, Condition #013 and Plan Approval 09-0210B, Section E- Group Name: Enclosed Flares, Condition #011

[Note: The requirements under 40 CFR §§ 60.763, 60.765 and 60.766 for the operation of the GCCS have been replaced by the operational requirements under 40 CFR §§ 63.1958, 63.1960, and 63.1961 as allowed by 40 CFR § 60.762(b)(2)(iv). Refer to Section C, Condition #026 for further information.]

025 [25 Pa. Code §127.12b]**Plan approval 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/chieff/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.

[Note: The requirements under 40 CFR §§ 60.763, 60.765 and 60.766 for the operation of the GCCS have been replaced by the operational requirements under 40 CFR §§ 63.1958, 63.1960, and 63.1961 as allowed by 40 CFR § 60.762(b)(2)(iv). Refer to Section C, Condition #026 for further information.]

026 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

**SECTION D. Source Level Plan Approval Requirements**

[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 40 CFR §60.765(a)(3)(iii) or (a)(5)(iii) and is expected to take longer than 120 days after the initial exceedance to complete, the 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 40 CFR §60.765(a)(3)(iii) or (a)(5)(iii) 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.

[Note: The requirements under 40 CFR §§ 60.763, 60.765 and 60.766 for the operation of the GCCS have been replaced by the operational requirements under 40 CFR §§ 63.1958, 63.1960, and 63.1961 as allowed by 40 CFR § 60.762(b)(2)(iv). Refer to Section C, Condition #026 for further information.]

VI. WORK PRACTICE REQUIREMENTS.**# 027 [25 Pa. Code §127.12b]****Plan approval 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 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.

028 [25 Pa. Code §127.12b]**Plan approval 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:

$$MNOC = 1.89 \times 10^{-3} QFLG CNMOC$$

MNOC = 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

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- (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.

029 [25 Pa. Code §127.12b]**Plan approval 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 #010. 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.

030 [25 Pa. Code §127.12b]**Plan approval 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 pipe below or above the landfill surface. The connector assembly shall include a positive closing throttle valve, any necessary seals and couplings, access couplings

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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).

031 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

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.

032 [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 asbestos-containing 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 Site.....2.5 cm (1 inch) Sans Serif, Gothic or Block

Do Not Create Dust.....1.9 cm (3/4 inch) Sans Serif, Gothic or Block

Breathing Asbestos is Hazardous to14 Point Gothic
Your Health

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.

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(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 40 CFR § 61.149(f) 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 asbestos-containing 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.

**SECTION D. Source Level Plan Approval Requirements**

(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))

033 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1961]

Subpart AAAA - National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills
Monitoring of operations.

The permittee must calibrate, maintain, and operate according to the manufacturer's specifications a device that records flow to the treatment system and bypass of the treatment system (if applicable). Beginning no later than September 27, 2021, each owner or operator must maintain and operate all monitoring systems associated with the treatment system in accordance with the site-specific treatment system monitoring plan required in 40 CFR § 63.1983(b)(5)(ii). The permittee must:

(a) Install, calibrate, and maintain a gas flow rate measuring device that records the flow to the treatment system at least every 15 minutes; and

(b) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism 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.

VII. ADDITIONAL REQUIREMENTS.

034 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

The provisions of 40 CFR Part 60, Subpart XXX and Part 63, Subpart AAAA set forth in this permit shall apply at all times including during periods of start-up, shutdown, or malfunction (SSM). During periods of startup, shutdown or malfunction, the permittee must comply with the work practice standard in 40 CFR § 60.763(e) rather than the operational standards of 40 CFR § 60.765. Per 40 CFR § 63.1930(b), the requirements of the subpart apply at all times without exception and the SSM requirements of the General Provisions §63.10 do not apply.

**SECTION D. Source Level Plan Approval Requirements**

Source ID: C10

Source Name: BACK-UP ENCLOSED FLARE FAIRLESS 1

Source Capacity/Throughput: 300.000 MCF/HR LANDFILL GAS

I. RESTRICTIONS.**Emission Restriction(s).****# 001 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) Back-up enclosed flare C10 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 PM_{2.5} (filterable and condensable):
0.011 lb/MMBtu, 1.71 lb/hr

(b) The enclosed flare, Source ID C10, 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, PM_{2.5} (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 §127.12b]****Plan approval terms and conditions.**

(a) Flare C10, when used as a back-up flare, shall burn on-site landfill gas generated from the Fairless Landfill, GROWS, and GROWS North except when auxiliary fuel is used during restart or start-up.

(b) Flare C10 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) Flare C10 may have additional functions to those in part (b) of this condition, provided these have been defined by Plan Approval.

(d) Flare C10 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, flare C10 is 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 §127.12b]****Plan approval terms and conditions.**

(a) Operation of C10 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 back-up enclosed flare C10 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.

**SECTION D. Source Level Plan Approval Requirements****Control Device Efficiency Restriction(s).****# 004 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

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

The enclosed flare C10 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 §127.12b]****Plan approval terms and conditions.**

(a) Flare C10 shall be stack tested as required in paragraphs (b)-(g) of this condition by December 31, 2024 unless this flare is decommissioned before December 31, 2024. The flare is considered decommissioned when the piping connecting the flare to the LFG collection system has been disconnected.

(b) After the initial stack test required in paragraph (a), permittee shall perform a stack test using Department-approved procedures once every five (5) calendar years, where five (5) calendar years is defined as beginning with the calendar year the latest stack test was performed and ending on December 31, five (5) years later. In accordance with 25 Pa. Code § 139.11(1), 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. Refer to PADEP Source Testing Program website online for further information related to source testing including Source Testing FAQ and the PADEP Source Testing Manual.

(c) 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.

(d) The stack test shall, at a minimum, test for VOC, NMOC, NO_x, 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, NO_x, CO and SO₂ and additionally on a lb/MMBtu basis for NO_x and CO.

(e) 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).

(f) Within sixty (60) days after the source test(s) (unless a more stringent regulatory requirement applies), an electronic copy of the complete test report, including all operating conditions, shall be submitted to the Regional Air Quality Manager for approval.

(g) 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.

006 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

(a) The permittee shall email 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 (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.

Southeast Region
RA-EPSEstacktesting@pa.gov

**SECTION D. Source Level Plan Approval Requirements**

Central Office
RA-EPstacktesting@pa.gov

(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): edit

- 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, Tier II, etc.)

(c) 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".

III. MONITORING REQUIREMENTS.**# 007 [25 Pa. Code §127.12b]****Plan approval 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 the back-up enclosed flare C10:

- (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) 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
- (c) 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 §127.12b]**Plan approval 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

**SECTION D. Source Level Plan Approval Requirements**

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 §127.12b]**Plan approval terms and conditions.**

(a) The permittee shall monitor the hours of operation when flare C10 is in operation.

(b) The permittee shall calculate the VOC, NO_x, CO, SO₂, PM, PM₁₀ and PM_{2.5} emissions from the enclosed flare on a monthly basis.

(c) The permittee shall calculate the VOC, NO_x, CO, SO₂, PM, PM₁₀ and PM_{2.5} emissions from the flare, Source IDs C10, 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 §127.12b]****Plan approval terms and conditions.**

The permittee shall record the following when the flare is operating:

(a) the hours of operation

(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 §127.12b]**Plan approval terms and conditions.**

The permittee shall use the landfill gas flow in scfm to the 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 D of this plan approval for this source.

012 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

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

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

(b) the hours of operation of the flare; and

(c) VOC, NO_x, CO, SO₂, PM, PM₁₀ and PM_{2.5} emissions from the enclosed flare, C10.

013 [25 Pa. Code §127.12b]**Plan approval 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 the enclosed flare, C10, on-site records of the flowrate of landfill gas to each enclosed flare and the temperature of the 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 flare C10 was bypassed directly to the atmosphere for a period of one hour

**SECTION D. Source Level Plan Approval Requirements**

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 the flare,
- (ii) Performance tests of the enclosed flare,
- (iii) Twelve (12) month rolling summation of the VOC, SO_x, CO, PM and NO_x 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 the 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 §127.12b]

Plan approval terms and conditions.

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

VI. WORK PRACTICE REQUIREMENTS.

015 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

016 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The 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 §127.12b]

Plan approval 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 the flare (C10) 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) shall be allowed an appropriate warm up sequence as per manufacturer's specifications, to attain the minimum operating temperature.
- (d) The flare shall be designed for a minimum retention time of 0.7 seconds at 1800 F.

**SECTION D. Source Level Plan Approval Requirements**

(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 §127.12b]

Plan approval 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.

019 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

020 [25 Pa. Code §127.12b]

Plan approval 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.

**SECTION E. Source Group Plan Approval Restrictions.**

Group Name: ULE FLARES

Group Description: ULE Flares from 09-0210B

Sources included in this group

ID	Name
C12	ENCLOSED ULE FLARE 1
C13	ENCLOSED ULE FLARE 2
C14	ENCLOSED ULE FLARE 3

I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VII. ADDITIONAL REQUIREMENTS.

001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

This flares shall comply with the requirements of the most recent version of plan approval 09-0210B and/or permit # 09-00210.

**SECTION F. Alternative Operation Requirements.**

No Alternative Operations exist for this Plan Approval facility.

**SECTION G. Emission Restriction Summary.**

Source Id	Source Description
110	MSW LANDFILL - FAIRLESS
Emission Limit	
39.600 Tons/Yr	calculated after closure in accordance with
Pollutant	
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 H. Miscellaneous.**

AUTH 1450337; APS 1094511: Plan approval to expand the current landfill, Source ID 110 from 47.4 million bank yards and 27.9 million ton of MSW to 74.58 million bank yards and 48.41 million ton of MSW

Items changed from the current 09-00210 permit include:

- addition of RNG plant as a control for LFG
- addition of references to 40 CFR § 63 Subpart AAAA
- added requirement for timely repair and restart of inoperable LFG collection and/or control system
- added requirement to determine and record coordinates for methane surface emissions exceedances
- added flow monitoring and bypass lockdown requirements from 40 CFR 63.1961.

Note: Emissions from the landfill and ULE flares have ERC's associated with them

ERC's under plan approval 09-0210B for ULE flares, original design volume (47.4 million yd³ and 27.9 million tons MSW) MSW landfill and RFD 7216-open flare (Source IDs 110, C12, C13, C14) in the following amounts:

VOC: 60 tons to offset 46 tons VOCs (1.3:1)

NOx: 107 tons to offset 82.23 tons (1.3:1)

Emissions from these sources as originally designed in plan approvals 09-0210A for the MSW landfill (Source ID 110) and 09-0210B for the ULE flares (Source IDs C12, C13, and C14) are effectively "zeroed" and cannot be used for calculating demand growth under 25 PA Code § 127.203a nor should they be counted as contemporaneous increases in 5-year and 10-year period immediately prior to a new plan approval application.

Emissions from the expansion of the MSW landfill (Source ID 110) have not been offset (16.99 tons VOC).



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