



Morris County Municipal Utilities Authority

Transportation And Disposal Of All Solid Waste Received At The Solid Waste Transfer Stations

Volume III Fairless Landfill

SUBMITTED BY:

Waste Management of New Jersey, Inc.

CONTACT:

Jessica McLane | Industrial Account Executive
570-205-9095 | jpersing@wm.com



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TAB 1

Air Quality Program Title V Operating Permit



09-00210

WASTE MGMT OF FAIRLESS/FAIRLESS LDFL



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY PROGRAM

TITLE V/STATE OPERATING PERMIT

Issue Date: March 9, 2020
Expiration Date: March 31, 2025

Effective Date: April 1, 2020

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

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

TITLE V Permit No: 09-00210

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

Owner Information

Name: WASTE MGMT OF FAIRLESS LLC
Mailing Address: 1000 NEW FORD MILL RD
MORRISVILLE, PA 19067-3704

Plant Information

Plant: WASTE MGMT OF FAIRLESS/FAIRLESS LDFL
Location: 09 Bucks County 09002 Falls Township
SIC Code: 4953 Trans. & Utilities - Refuse Systems

Responsible Official

Name: ROBERT C JONES
Title: DIST MGR II
Phone (215) 428 - 4390

Permit Contact Person

Name: BRIAN P BOLVIN PE
Title: SITE ENGR
Phone: (215) 428 - 4384

[Signature]

James D. Rebarchak
JAMES D. REBARCHAK, SOUTHEAST REGION AIR PROGRAM MANAGER

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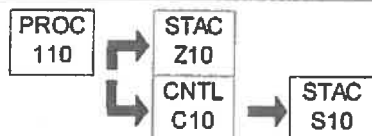
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**SECTION A. Site Inventory List**

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

PERMIT MAPS

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

Words and terms that are not otherwise defined in this permit shall have the meanings set forth in Section 3 of the Air Pollution Control Act (35 P.S. § 4003) and 25 Pa. Code § 121.1.

#002 [25 Pa. Code § 121.7]**Prohibition of Air Pollution**

No person may permit air pollution as that term is defined in the act.

#003 [25 Pa. Code § 127.512(c)(4)]**Property Rights**

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

#004 [25 Pa. Code § 127.446(a) and (c)]**Permit Expiration**

This operating permit is issued for a fixed term of five (5) years and shall expire on the date specified on Page 1 of this permit. The terms and conditions of the expired permit shall automatically continue pending issuance of a new Title V permit, provided the permittee has submitted a timely and complete application and paid applicable fees required under 25 Pa. Code Chapter 127, Subchapter I and the Department is unable, through no fault of the permittee, to issue or deny a new permit before the expiration of the previous permit. An application is complete if it contains sufficient information to begin processing the application, has the applicable sections completed and has been signed by a responsible official.

#005 [25 Pa. Code §§ 127.412, 127.413, 127.414, 127.446(e) & 127.503]**Permit Renewal**

(a) An application for the renewal of the Title V permit shall be submitted to the Department at least six (6) months, and not more than 18 months, before the expiration date of this permit. The renewal application is timely if a complete application is submitted to the Department's Regional Air Manager within the timeframe specified in this permit condition.

(b) The application for permit renewal shall include the current permit number, the appropriate permit renewal fee, a description of any permit revisions and off-permit changes that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term.

(c) The renewal application shall also include submission of proof that the local municipality and county, in which the facility is located, have been notified in accordance with 25 Pa. Code § 127.413. The application for renewal of the Title V permit shall also include submission of compliance review forms which have been used by the permittee to update information submitted in accordance with either 25 Pa. Code § 127.412(b) or § 127.412(j).

(d) The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information during the permit renewal process. The permittee shall also promptly provide additional information as necessary to address any requirements that become applicable to the source after the date a complete renewal application was submitted but prior to release of a draft permit.

#006 [25 Pa. Code §§ 127.450(a)(4) & 127.464(a)]**Transfer of Ownership or Operational Control**

(a) In accordance with 25 Pa. Code § 127.450(a)(4), a change in ownership or operational control of the source shall be treated as an administrative amendment if:

(1) The Department determines that no other change in the permit is necessary;

(2) A written agreement has been submitted to the Department identifying the specific date of the transfer of permit responsibility, coverage and liability between the current and the new permittee; and,

(3) A compliance review form has been submitted to the Department and the permit transfer has been approved by the Department.

**SECTION B. General Title V Requirements**

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

#007 [25 Pa. Code § 127.513, 35 P.S. § 4008 and § 114 of the CAA]**Inspection and Entry**

(a) Upon presentation of credentials and other documents as may be required by law for inspection and entry purposes, the permittee shall allow the Department of Environmental Protection or authorized representatives of the Department to perform the following:

(1) Enter at reasonable times upon the permittee's premises where a Title V source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit;

(2) Have access to and copy or remove, at reasonable times, records that are kept under the conditions of this permit;

(3) Inspect at reasonable times, facilities, equipment including monitoring and air pollution control equipment, practices, or operations regulated or required under this permit;

(4) Sample or monitor, at reasonable times, substances or parameters, for the purpose of assuring compliance with the permit or applicable requirements as authorized by the Clean Air Act, the Air Pollution Control Act, or the regulations promulgated under the Acts.

(b) Pursuant to 35 P.S. § 4008, no person shall hinder, obstruct, prevent or interfere with the Department or its personnel in the performance of any duty authorized under the Air Pollution Control Act.

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

#008 [25 Pa. Code §§ 127.25, 127.444, & 127.512(c)(1)]**Compliance Requirements**

(a) The permittee shall comply with the conditions of this permit. Noncompliance with this permit constitutes a violation of the Clean Air Act and the Air Pollution Control Act and is grounds for one (1) or more of the following:

(1) Enforcement action

(2) Permit termination, revocation and reissuance or modification

(3) Denial of a permit renewal application

(b) A person may not cause or permit the operation of a source, which is subject to 25 Pa. Code Article III, unless the source(s) and air cleaning devices identified in the application for the plan approval and operating permit and the plan approval issued to the source are operated and maintained in accordance with specifications in the applications and the conditions in the plan approval and operating permit issued by the Department. A person may not cause or permit the operation of an air contamination source subject to 25 Pa. Code Chapter 127 in a manner inconsistent with good operating practices.

(c) For purposes of Sub-condition (b) of this permit condition, the specifications in applications for plan approvals and operating permits are the physical configurations and engineering design details which the Department determines are essential for the permittee's compliance with the applicable requirements in this Title V permit.

#009 [25 Pa. Code § 127.512(c)(2)]**Need to Halt or Reduce Activity Not a Defense**

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

#010 [25 Pa. Code §§ 127.411(d) & 127.512(c)(5)]**Duty to Provide Information**

(a) The permittee shall furnish to the Department, within a reasonable time, information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or



Pennsylvania
Department of Environmental Protection

March 27, 2025

VIA E-MAIL: BBolvin@wm.com

Mr. Brian P. Bolvin, P.E.
Site Engineer
Waste Management of Fairless, LLC
1000 New Ford Mill Road
Morrisville, PA 19067

Re: Minor Permit Modification
Fairless Landfill
Permit ID No. 101699
APS ID No. 688905, AUTH ID No. 1519146
Falls Township
Bucks County

Dear Mr. Bolvin:

The Pennsylvania Department of Environmental Protection (DEP) has reviewed the minor permit modification application received on March 10, 2025, requesting DEP's approval for the construction of a portion of the lined area in Cell 13 of the approved Fairless Landfill according to an intermediate grading plan that will allow waste disposal operations to be commenced prior to full development of Cell 13. The Fairless Landfill is an active municipal waste landfill located in Falls Township, Bucks County. We have determined that you have satisfied all applicable requirements necessary to perform these activities. Therefore, we have issued the enclosed permit in accordance with Article V of the Solid Waste Management Act, 35 P.S. §§ 6018.101 et seq.

Compliance with the limitations and stipulations that have been set forth in your permit is mandatory.

Any person aggrieved by this action may appeal the action to the Environmental Hearing Board (Board) pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. § 7514, and the Administrative Agency Law, 2 Pa. C.S. Chapter 5A. The Board's address is:

Environmental Hearing Board
Rachel Carson State Office Building, Second Floor
400 Market Street
P.O. Box 8457
Harrisburg, PA 17105-8457

TDD users may contact the Board through the Pennsylvania Relay Service, 800.654.5984.

Appeals must be filed with the Board within 30 days of receipt of notice of this action unless the appropriate statute provides a different time. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

A Notice of Appeal form and the Board's rules of practice and procedure may be obtained online at www.ehb.pa.gov or by contacting the Secretary to the Board at 717.787.3483. The Notice of Appeal form and the Board's rules are also available in braille and on audiotape from the Secretary to the Board.

IMPORTANT LEGAL RIGHTS ARE AT STAKE. YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD AT 717.787.3483 FOR MORE INFORMATION. YOU DO NOT NEED A LAWYER TO FILE A NOTICE OF APPEAL WITH THE BOARD.

IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST BE FILED WITH AND RECEIVED BY THE BOARD WITHIN 30 DAYS OF RECEIPT OF NOTICE OF THIS ACTION.

If you have any questions about the enclosed permit or requirements of the Solid Waste Management Act, please contact Dr. Mohamad Mazid, P.E., Chief, Technical Services, by e-mail mmazid@pa.gov or telephone at 484.250.5768.

Thank you for your cooperation.

Sincerely,



Shawn Mountain
Environmental Program Manager
Waste Management

Enclosure: Permit Modification

cc: Mr. Takita – Falls Township (w/enclosure)
Ms. Kostick – Bucks County Health Department (w/enclosure)
Mr. Kucowski – Waste Management of Fairless, LLC
Mr. Whitty, P.E. – WSP USA Inc.
Dr. Mazid, P.E.
Mr. Bower
Mr. K. Bauer
Mr. Mountain
Re30 (GJS25WM)85-1a

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

FORM NO. 13-A

MODIFICATION TO SOLID WASTE DISPOSAL AND/OR PROCESSING PERMIT

Under the provisions of Act 97, the Solid Waste Management Act of July 7, 1980, Solid Waste Permit

Number 101699 issued on (date original permit was issued) March 30, 2016 to
(permittee) Waste Management of Fairless, LLC
(address) 1000 New Ford Mill Road
Morrisville, PA 19067

is hereby modified as follows:

1. This amended Waste Management Permit is issued based upon application No. 101699 (APS No. 688905, AUTH No. 1519146), which was received at the Southeast Regional Office of the Department of Environmental Protection (DEP) on March 10, 2025. This amended waste management permit approves the construction of a portion of the lined area in Cell 13 of the approved Fairless Landfill according to an intermediate grading plan that will allow waste disposal operations to be commenced prior to full development of Cell 13. The Fairless Landfill is an active municipal waste landfill located in Falls Township, Bucks County.

This approved permit application consists of the following documents (unless otherwise noted, 'received' and 'revised' refer to the dates documents were received by DEP and not necessarily the dates of the documents themselves):

General Information Form (GIF), received on March 10, 2025.

Form A - Application for Municipal or Residual Waste Permit, received on March 10, 2025.

Form B - Professional Certification, received on March 10, 2025.

Form B1 - Application Form Certification, received on March 10, 2025.

Form MRW-C - Identification of Interests and Compliance History, received on March 10, 2025.

Form 3 - Map Requirements - Phase II, Municipal Waste and Construction/Demolition Waste Landfills, received on March 10, 2025.

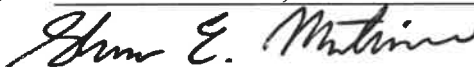
Form 14 - Operation Plan - Phase II, received on March 10, 2025.

Drawing No. 01, "Proposed Cell 13 Intermediate Construction - Top of Subbase", Rev. A, Dated February 10, 2025, received on March 10, 2025.

The contents of all the above-listed documents are hereby incorporated in this permit amendment as conditions with which the Permittee must comply. Where the terms or conditions of this permit amendment differ from the documents incorporated by reference above, the terms or conditions of this amendment shall govern.

2. Nothing in this permit shall be construed to supersede, amend, or authorize violation of, the provisions of any valid and applicable local law, ordinance, or regulation, provided that said

This modification shall be attached to the existing Solid Waste Permit described above and shall become a part thereof effective on (date) March 27, 2025



FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

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 (permittee) Waste Management of Fairless, LLC
 (address) 1000 New Ford Mill Road
Morrisville, PA 19067

is hereby modified as follows:

local law, ordinance, or regulation is not preempted by the Pennsylvania Solid Waste Management Act, the Act of July 7, 1980, Act 97, 35 P.S. 6018.101 et seq.

3. As a condition of this permit and of the Permittee's authority to conduct the activities authorized by this permit, the Permittee hereby authorizes and consents to allow authorized employees or agents of DEP, without advanced notice or a search warrant, upon presentation of appropriate credentials, and without delay, to have access to and to inspect all areas on which solid waste management activities are being or will be conducted. The authorization and consent shall include consent to collect samples of waste, water or gases, to take photographs, to perform measurements, surveys, and other tests, to inspect any monitoring equipment, to inspect the methods of operation, and to inspect and/or copy documents, books, or papers required by DEP to be maintained. This permit condition is referenced in accordance with Sections 608 and 610(7) of the Solid Waste Management Act, 35 P.S. §§ 6018.608 and 6018.610(7). This condition in no way limits any other powers granted under the Solid Waste Management Act.
4. This Minor Permit Modification approval is issued to allow an intermediate grading plan for a portion of the lined disposal area in Cell 13 to be completed and fully contained prior to the full development of the rest of Cell 13 such that waste disposal operations may commence early upon a construction certification (Form 37) as described in the following Permit Condition has been submitted to and accepted by DEP. This early completed portion of Cell 13 shall be constructed in conformance with the "Letter from WSP Dated February 13, 2025, Regarding Intermediate Grading Plan for Cell 13" in Appendix A of Form 14 and Drawing 01 - Proposed Cell 13 Intermediate Construction – Top of Subbase, referenced in Condition No. 1, above.
5. Upon completion of the portion of the lined disposal area in Cell 13 in accordance with the intermediate grading plan, Form 37, Certification of Facility Construction Activity, shall be submitted to the Regional Solid Waste Manager in DEP's Southeast Regional Office for review and approval prior to waste disposal operations be commenced in the completed area.

This modification shall be attached to the existing Solid Waste Permit described above and shall become a part thereof effective on (date) March 27, 2025



FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

FORM NO. 13-A

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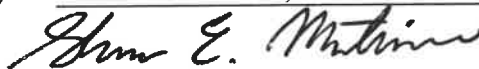
Morrisville, PA 19067

is hereby modified as follows:

6. Except as expressly described herein, no other changes to the facility's permit are made as a result of this permit modification.

Re 30 (GJS25WM)85-1

This modification shall be attached to the existing Solid Waste Permit described above and shall become a part thereof effective on (date) March 27, 2025



FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

**SECTION B. General Title V Requirements**

to determine compliance with the permit.

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

#011 [25 Pa. Code §§ 127.463, 127.512(c)(3) & 127.542]**Reopening and Revising the Title V Permit for Cause**

(a) This Title V permit may be modified, revoked, reopened and reissued or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay a permit condition.

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

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

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

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

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

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

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

#012 [25 Pa. Code § 127.543]**Reopening a Title V Permit for Cause by EPA**

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

#013 [25 Pa. Code § 127.522(a)]**Operating Permit Application Review by the EPA**

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

R3_Air_Apps_and_Notices@epa.gov

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

#014 [25 Pa. Code § 127.541]**Significant Operating Permit Modifications**

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

**SECTION B. General Title V Requirements**

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

R3_Air_Apps_and_Notices@epa.gov

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

#015 [25 Pa. Code §§ 121.1 & 127.462]**Minor Operating Permit Modifications**

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

R3_Air_Apps_and_Notices@epa.gov

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

#016 [25 Pa. Code § 127.450]**Administrative Operating Permit Amendments**

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

R3_Air_Apps_and_Notices@epa.gov

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

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

#017 [25 Pa. Code § 127.512(b)]**Severability Clause**

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

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

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

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

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

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

**SECTION B. General Title V Requirements**

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

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

#019 [25 Pa. Code §§ 127.14(b) & 127.449]**Authorization for De Minimis Emission Increases**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**SECTION B. General Title V Requirements**

- (5) Laboratory equipment used exclusively for chemical or physical analysis.
- (6) Other sources and classes of sources determined to be of minor significance by the Department.
- (d) This permit does not authorize de minimis emission increases if the emissions increase would cause one or more of the following:
- (1) Increase the emissions of a pollutant regulated under Section 112 of the Clean Air Act except as authorized in Subparagraphs (b)(4) and (5) of this permit condition.
 - (2) Subject the facility to the prevention of significant deterioration requirements in 25 Pa. Code Chapter 127, Subchapter D and/or the new source review requirements in Subchapter E.
 - (3) Violate any applicable requirement of the Air Pollution Control Act, the Clean Air Act, or the regulations promulgated under either of the acts.
 - (4) Changes which are modifications under any provision of Title I of the Clean Air Act and emission increases which would exceed the allowable emissions level (expressed as a rate of emissions or in terms of total emissions) under the Title V permit.
 - (e) Unless precluded by the Clean Air Act or the regulations thereunder, the permit shield described in 25 Pa. Code § 127.516 (relating to permit shield) shall extend to the changes made under 25 Pa. Code § 127.449 (relating to de minimis emission increases).
 - (f) Emissions authorized under this permit condition shall be included in the monitoring, recordkeeping and reporting requirements of this permit.
 - (g) Except for de minimis emission increases allowed under this permit, 25 Pa. Code § 127.449, or sources and physical changes meeting the requirements of 25 Pa. Code § 127.14, the permittee is prohibited from making physical changes or engaging in activities that are not specifically authorized under this permit without first applying for a plan approval. In accordance with § 127.14(b), a plan approval is not required for the construction, modification, reactivation, or installation of the sources creating the de minimis emissions increase.
 - (h) The permittee may not meet de minimis emission threshold levels by offsetting emission increases or decreases at the same source.

#020 [25 Pa. Code §§ 127.11a & 127.215]**Reactivation of Sources**

- (a) The permittee may reactivate a source at the facility that has been out of operation or production for at least one year, but less than or equal to five (5) years, if the source is reactivated in accordance with the requirements of 25 Pa. Code §§ 127.11a and 127.215. The reactivated source will not be considered a new source.
- (b) A source which has been out of operation or production for more than five (5) years but less than 10 years may be reactivated and will not be considered a new source if the permittee satisfies the conditions specified in 25 Pa. Code § 127.11a(b).

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

- (a) The owner of this Title V facility, or any other person, may not circumvent the new source review requirements of 25 Pa. Code Chapter 127, Subchapter E by causing or allowing a pattern of ownership or development, including the phasing, staging, delaying or engaging in incremental construction, over a geographic area of a facility which, except for the pattern of ownership or development, would otherwise require a permit or submission of a plan approval application.
- (b) No person may permit the use of a device, stack height which exceeds good engineering practice stack height, dispersion technique or other technique which, without resulting in reduction of the total amount of air contaminants emitted, conceals or dilutes an emission of air contaminants which would otherwise be in violation of this permit, the Air Pollution Control Act or the regulations promulgated thereunder, except that with prior approval of the Department,

**SECTION B. General Title V Requirements**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**SECTION B. General Title V Requirements**

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

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

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

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

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

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

#026 [25 Pa. Code § 127.513]**Compliance Certification**

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

- (1) The identification of each term or condition of the permit that is the basis of the certification.
- (2) The compliance status.
- (3) The methods used for determining the compliance status of the source, currently and over the reporting period.
- (4) Whether compliance was continuous or intermittent.

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

#027 [25 Pa. Code § 127.3]**Operational Flexibility**

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

- (1) Section 127.14 (relating to exemptions)

**SECTION B. General Title V Requirements**

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

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

Risk Management

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

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

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

- (i) Three years after the date on which a regulated substance is first listed under § 68.130; or,
- (ii) The date on which a regulated substance is first present above a threshold quantity in a process.

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

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

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

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

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

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

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

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

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

**SECTION B. General Title V Requirements**

(2) The permittee fails to submit a compliance schedule or include a statement in the compliance certification required under Condition #26 of Section B of this Title V permit that the Title V facility is in compliance with the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68, and 25 Pa. Code § 127.512(i).

#029 [25 Pa. Code § 127.512(e)]**Approved Economic Incentives and Emission Trading Programs**

No permit revision shall be required under approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this Title V permit.

#030 [25 Pa. Code §§ 127.516, 127.450(d), 127.449(f) & 127.462(g)]**Permit Shield**

(a) The permittee's compliance with the conditions of this permit shall be deemed in compliance with applicable requirements (as defined in 25 Pa. Code § 121.1) as of the date of permit issuance if either of the following applies:

(1) The applicable requirements are included and are specifically identified in this permit.

(2) The Department specifically identifies in the permit other requirements that are not applicable to the permitted facility or source.

(b) Nothing in 25 Pa. Code § 127.516 or the Title V permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act, including the authority of the Administrator of the EPA provided thereunder.

(2) The liability of the permittee for a violation of an applicable requirement prior to the time of permit issuance.

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act.

(4) The ability of the EPA to obtain information from the permittee under Section 114 of the Clean Air Act.

(c) Unless precluded by the Clean Air Act or regulations thereunder, final action by the Department incorporating a significant permit modification in this Title V Permit shall be covered by the permit shield at the time that the permit containing the significant modification is issued.

#031 [25 Pa. Code §135.3]**Reporting**

(a) The permittee shall submit by March 1 of each year an annual emissions report for the preceding calendar year. The report shall include information for all active previously reported sources, new sources which were first operated during the preceding calendar year, and sources modified during the same period which were not previously reported. All air emissions from the facility should be estimated and reported.

(b) A source owner or operator may request an extension of time from the Department for the filing of an annual emissions report, and the Department may grant the extension for reasonable cause.

#032 [25 Pa. Code §135.4]**Report Format**

Emissions reports shall contain sufficient information to enable the Department to complete its emission inventory. Emissions reports shall be made by the source owner or operator in a format specified by the Department.

**SECTION C. Site Level 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**

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

- (a) construction or demolition of buildings or structures;
- (b) grading, paving and maintenance of roads and streets;
- (c) use of roads and streets. Emissions from material in or on trucks, railroad cars and other vehicular equipment are not considered as emissions from use of roads and streets;
- (d) clearing of land;
- (e) stockpiling of materials;
- (f) open burning operations, as specified in 25 Pa. Code § 129.14;
- (g) blasting in open pit mines. Emissions from drilling are not considered as emissions from blasting;
- (h) coke oven batteries, provided the fugitive air contaminants emitted from any coke oven battery comply with the standards for visible fugitive emissions in 25 Pa. Code §§ 123.44 and 129.15 (relating to limitations of visible fugitive air contaminants from operation of any coke oven battery, and coke pushing operations); and
- (i) sources and classes of sources other than those identified in (a)-(h), above, for which the permittee has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:
 - (1) the emissions are of minor significance with respect to causing air pollution; and
 - (2) the emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.

003 [25 Pa. Code §123.2]**Fugitive particulate matter**

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

004 [25 Pa. Code §123.31]**Limitations**

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

005 [25 Pa. Code §123.41]**Limitations**

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

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

**SECTION C. Site Level Requirements**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**SECTION C. Site Level Requirements**

- (f) A fire set solely for recreational or ceremonial purposes.
- (g) A fire set solely for cooking food.

II. TESTING REQUIREMENTS.**# 009 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

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

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

III. MONITORING REQUIREMENTS.**# 010 [25 Pa. Code §123.43]****Measuring techniques**

Visible emissions may be measured using either of the following:

- (a) a device approved by the Department and maintained to provide accurate opacity measurements; or
- (b) observers, trained and qualified to measure plume opacity with the naked eye or with the aid of any devices approved by the Department

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

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

PM10
PM2.5

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

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

PM10
PM2.5

012 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

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

- (1) Odors which may be objectionable (as per 25 Pa. Code §123.31).
- (2) Visible Emissions (as per 25 Pa. Code §§123.41 and 123.42).

**SECTION C. Site Level Requirements**

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

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

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

IV. RECORDKEEPING REQUIREMENTS.**# 013 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

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

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

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

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

PM10

PM2.5

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

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

PM10

PM2.5

015 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

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

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

**SECTION C. Site Level Requirements****V. REPORTING REQUIREMENTS.****# 016 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

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

The permittee shall submit the following:

(a) An annual certification of compliance, due by April 1st of each year, for the period covering January 1 through December 31 of the previous year. This certification of compliance shall document compliance with all permit terms and conditions set forth in this Title V permit as required under condition #26 of section B of this permit. The annual certification of compliance shall be submitted to the Department in paper form, and EPA Region III in electronic form at the following email address: R3_APD_Permits@epa.gov

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

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

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

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

and

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

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

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

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

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

**SECTION C. Site Level Requirements**

(c) The report shall describe the following:

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

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

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

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

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

VI. WORK PRACTICE REQUIREMENTS.**# 019 [25 Pa. Code §123.1]****Prohibition of certain fugitive emissions**

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

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

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

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

021 [25 Pa. Code §123.1]**Prohibition of certain fugitive emissions**

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

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

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

**SECTION C. Site Level Requirements**

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

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

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

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

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

(c) Paving and maintenance of roadways.

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

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

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

VII. ADDITIONAL REQUIREMENTS.**# 024 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

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

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

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

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

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

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

**SECTION C. Site Level Requirements****VIII. COMPLIANCE CERTIFICATION.**

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

IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.

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

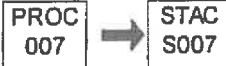
**SECTION D. Source Level Requirements**

Source ID: 007

Source Name: SEQUENTIAL BATCH REACTOR (TK-5)

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

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

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

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

**SECTION D. Source Level Requirements**

Source ID: 011

Source Name: SEQUENTIAL BATCH REACTOR (TK-6)

Source Capacity/Throughput: 12,500.000 Gal/HR

LEACHATE

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

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

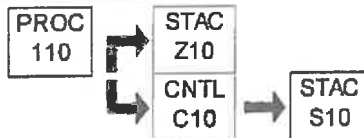
***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

Source ID: 110

Source Name: MSW LANDFILL - FAIRLESS

Source Capacity/Throughput:

**I. RESTRICTIONS.****Emission Restriction(s).**

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

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

002 [25 Pa. Code §127.441]
Operating permit terms and conditions.

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

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

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

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

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

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

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

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

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

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

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

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

**SECTION D. Source Level Requirements**

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

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

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

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

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

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

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

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

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

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

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

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

**SECTION D. Source Level Requirements****# 004 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

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

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

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

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

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

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

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

(iv) Any location that initially showed an exceedance but has a methane concentration less than 500 ppm methane above background at the 10-day re-monitoring specified in paragraph 40 CFR Section 60.755 (c)(4) (ii) or (iii) (Condition #004(c)(ii) or (iii)) shall be re-monitored 1 month from the initial exceedance. If the 1-month 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) (Condition #004(c)(iii) or (v)) shall be taken.

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

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

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

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

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

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

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

**SECTION D. Source Level Requirements**

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

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

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

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

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

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

Throughput Restriction(s).**# 006 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

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

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

Control Device Efficiency Restriction(s).**# 007 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

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

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

**SECTION D. Source Level Requirements**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

II. TESTING REQUIREMENTS.

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



SECTION D. Source Level Requirements

III. MONITORING REQUIREMENTS.

009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall demonstrate annually the site-specific NMOC concentration and VOC concentration. Except as provided below in paragraphs (a)(i)-(iii), the permittee shall use the following parameters in calculating VOC emission rate: methane generation rate constant, k , equal to 0.023/year; and methane generation potential L_0 , equal to 169.9 m³/Mg (Mega gram) of solid waste.

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

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

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

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

010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

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

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

011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

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

012 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

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

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

**SECTION D. Source Level Requirements**

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

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

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

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

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

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

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

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

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

013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

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

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

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

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

On a monthly basis, the permittee shall monitor each well for nitrogen or oxygen. The nitrogen and oxygen content are 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).

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

- (A) The span must be set between 10 and 12 percent oxygen;
- (B) A data recorder is not required;
- (C) Only two calibration gases are required, a zero and span;
- (D) A calibration error check is not required;
- (E) The allowable sample bias, zero drift, and calibration drift are ± 10 percent.

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

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

IV. RECORDKEEPING REQUIREMENTS.**# 014 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

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

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

015 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

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

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

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

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

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

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

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

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

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

**SECTION D. Source Level Requirements**

permittee shall also keep:

- (i) up-to-date, readily accessible records of the installation date and location of all newly installed collectors; and
- (ii) readily accessible documentation of the nature, date of deposition, amount and location of asbestos-containing or nondegradable waste excluded from collection, as well as any nonproductive areas excluded from production.

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

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

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

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

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

The permittee shall keep:

- (i) For any root cause analysis for which corrective actions are required in 40 CFR §60.765(a)(3)(i) or (a)(5)(i) [Conditions #003(b)(i) and #005(b)(i)], a record of the root cause analysis conducted, including a description of the recommended corrective action(s) taken, and the date(s) the corrective action(s) were completed.
- (ii) For any root cause analysis for which corrective actions are required in §60.765(a)(3)(ii) or (a)(5)(ii) [Conditions #03(b)(ii) and #005(b)(ii)], a record of the root cause analysis conducted, the corrective action analysis, the date for corrective action(s) already completed following the positive pressure reading or high temperature reading, and, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates.
- (iii) For any root cause analysis for which corrective actions are required in §60.765(a)(3)(iii) or (a)(5)(iii) [Conditions #003(b)(iii) and #005(b)(iii)], a record of the root cause analysis conducted, the corrective action analysis, the date for corrective action(s) already completed following the positive pressure reading or high temperature reading, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates, and a copy of any comments or final approval on the corrective action analysis or schedule from the regulatory agency.

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

Subpart AAAA - National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills

What records and reports must I keep and submit?

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

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

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

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

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

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

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

Startup, shutdown, and malfunction plan.

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

018 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

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

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

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

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

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

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

V. REPORTING REQUIREMENTS.**# 019 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

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

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

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

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

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

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

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

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

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

021 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

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

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

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

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

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- (b) description and duration of all periods when landfill gas was diverted from the control device or treatment system through a bypass line or the indication of bypass flow;
- (c) description and duration of all periods when the control device or treatment system was not operating and the length of time the control device or treatment system was not operating;
- (d) all periods when the landfill gas collection system was not operating;
- (e) the location of each exceedance of the 500 ppm methane concentration at the surface of the landfill and the concentration recorded at each location for which an exceedance was recorded in the previous month. For location an instrument with latitude and longitude coordinates with an accuracy of at least 4 meters must be used. The coordinates must be in decimal degrees with at least five decimal places;
- (f) the date of installation and the location of each well or collection system expansion added in response to an exceedance or included as part of the gas collection and control system plan;
- (g) For any corrective action analysis for which corrective actions are required for exceedances of wellhead pressure or temperature and that take more than 60 days to correct, the root cause analysis conducted, including a description of the recommended corrective action(s), the date for corrective action(s) already completed following the positive pressure or temperature exceedance and for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates;
- (h) exceedances of enclosed flare operational parameters, recorded pursuant to Section E. Group Name:Flares Condition #013.

022 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1980]

Subpart AAAA - National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills

What records and reports must I keep and submit?

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

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

- (a) Identify any instance during which actions taken by the permittee during a start-up, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) were consistent with the procedures specified in the start-up, shutdown, malfunction plan.
- (b) Identify any instance where any action taken by permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the affected source's startup, shutdown, and malfunction plan, but the source does not exceed any applicable emission limitation in the relevant emission standard, or any revisions to the startup, shutdown, malfunction plan.
- (c) Include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded.
- (d) Consist of a letter, containing the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy.

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

023 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

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

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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.

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

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

The permittee must submit the following reports to the Administrator

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

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

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

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

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

VI. WORK PRACTICE REQUIREMENTS.**# 026 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

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

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

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

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

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

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

(b)

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

027 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

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

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

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

MNMOC = mass emission rate of NMOC, megagrams per year

QFLG = flow rate of landfill gas, cubic meters per minute

CNMOC = NMOC concentration, parts per million by volume as hexane

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

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

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

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

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

(a) For the purposes of calculating the maximum expected gas generation flow rate from the landfill, the equation pursuant to 40 CFR Section 60.765(a)(1)(ii) shall be used, unless another method has been approved by the Department. The k and L_0 kinetic factors should be those referenced in Condition #009. A value of no more than 15 years shall be used for the intended use period of the gas mover equipment. The active life of the landfill is the age of the landfill plus the estimated number of years until closure.

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

**SECTION D. Source Level Requirements****# 029 [25 Pa. Code §127.441]
Operating permit terms and conditions.**

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

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

(i) The landfill gas extraction components shall be constructed of polyvinyl chloride (PVC), high density polyethylene (HDPE) pipe, fiberglass, stainless steel or other nonporous corrosion resistant material of suitable dimensions to: convey projected amounts of gases; withstand installation, static, and settlement forces; and withstand planned overburden or traffic loads. The collection system shall extend as necessary to comply with emission and migration standards. Collection devices such as wells and horizontal collectors shall be perforated to allow gas entry without head loss sufficient to impair performance across the intended extent of control. Perforations shall be situated with regard to the need to prevent excessive air infiltration.

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

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

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

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

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

(a) Either there must be no visible emissions to the outside air from any active waste disposal site where 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 x 36 cm (20"x14") upright format signs specified in 29 CFR 1910.145(d)(4) and this paragraph; and

**SECTION D. Source Level Requirements**

(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 to Your Health	14 Point Gothic

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

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

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

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

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

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

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

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

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

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

(ii) The name, address, and telephone number of the transporter(s).

(iii) The quantity of the asbestos-containing waste material in cubic meters (cubic yards).

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

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(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.

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

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

(1) Scheduled starting and completion dates.

(2) Reason for disturbing the waste.

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

(4) Location of any temporary storage site and the final disposal site.

(Sections 112 and 301(a) of the Clean Air Act as amended (42 USC 7412, 7601(a))

031 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1955]

Subpart AAAA - National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills

What requirements must I meet?

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

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

**SECTION D. Source Level Requirements**

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

VII. ADDITIONAL REQUIREMENTS.

032 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

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

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

**SECTION D. Source Level Requirements**

Source ID: 500

Source Name: EXEMPT EMERGENCY GENERATOR ENGINES

Source Capacity/Throughput:

PROC
500STAC
S500**I. RESTRICTIONS.****Emission Restriction(s).**

001 [25 Pa. Code §123.21]

General

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

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

- a. 100 lbs per hour,
- b. 1000 lbs per day,
- c. 2.75 tons per ozone season (May 1 through September 30), and
- d. 6.6 tons per year, on a 12-month rolling basis.

Fuel Restriction(s).

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

II. TESTING REQUIREMENTS.

004 [25 Pa. Code §139.16]

Sulfur in fuel oil.

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

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

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

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

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

III. MONITORING REQUIREMENTS.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor:

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

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

**SECTION D. Source Level Requirements**

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

IV. RECORDKEEPING REQUIREMENTS.**# 006 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall maintain the following records:

- (a) The hours of operation per generator, on a monthly and 12-month rolling basis.
- (b) The permittee shall maintain records of total combined NO_x emissions in units of:

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

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

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

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

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

For all engines, the permittee shall maintain records of:

- (a) The occurrence and duration of each malfunction of operation and the corrective actions taken during periods of malfunction to minimize emissions.
- (b) Any performance tests and performance evaluations
- (c) All maintenance that is performed, including oil changes, filter changes, hose and belt replacements. Maintenance records shall include the engine hour meter reading at the time the maintenance is conducted.
- (d) The number of hours the engine is operated for emergencies, including the nature of the emergency.
- (e) The number of hours the engine is operated for non-emergencies.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.**# 009 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

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

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

**SECTION D. Source Level Requirements**

#015 of this section.

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

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

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

010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

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

In accordance with 40 CFR section 63.6640(f),

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

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

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

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

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

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

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

**SECTION D. Source Level Requirements**

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

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

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

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

011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

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

012 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

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

013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

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

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

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

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

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

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

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

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

VII. ADDITIONAL REQUIREMENTS.

015 [25 Pa. Code §127.441]

Operating permit terms and conditions.

This source consists of the following emergency generator engines:

(1) New Leachate Treatment Plant emergency generator

- Caterpillar 3456, 500 kW

- Model No. 235-4664

**SECTION D. Source Level Requirements**

- 764 hp
- 2003 model year engine, installed February 1, 2013

(2) SBR Area emergency generator

- Cummins
- Serial no. 30372305 & 308128
- 605 hp
- 2005 model year engine, installed August 15, 2005

(3) Scale House emergency generator

- Power Tech 8.1 liter by John Deere, 225 kW
- Serial no. RG6081A122825
- 302 hp
- 2000 model year engine, installed in 2001

(4) Old Leachate Treatment Plant emergency generator

- Caterpillar 3406
- Serial No. 4ZR02709
- 536 hp
- 1997 model year engine, installed in 1998

016 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

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

**SECTION D. Source Level Requirements**

Source ID: C10

Source Name: BACK-UP ENCLOSED FLARE FAIRLESS 1

Source Capacity/Throughput: 300.000 MCF/HR LANDFILL GAS

Conditions for this source occur in the following groups: FLARES

CNTL
C10STAC
S10**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

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

**SECTION E Source Group Restrictions.**

Group Name: FLARES

Group Description: new flares for fairless

Sources included in this group

ID	Name
C10	BACK-UP ENCLOSED FLARE FAIRLESS 1

I. RESTRICTIONS.**Emission Restriction(s).****# 001 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

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

VOC (as hexane): 1.40 lb/hr;

NOx 0.08 lb/MMBtu, 12.12 lb/hr;

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

SO₂: 12.7 lb/hr;PM, PM₁₀ and PM_{2.5} (filterable and condensable):
0.011 lb/MMBtu, 1.71 lb/hr

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

VOC (as hexane): 1.80 tons/year

NOx 16.1 tons/year

CO: 40.14 tons/year

SO₂: 16.8 tons/yearPM, 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 §127.441]****Operating permit terms and conditions.**

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

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

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

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

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

**SECTION E Source Group Restrictions.**

the Enclosed ULE Flares 1,2, and 3.

Throughput Restriction(s).

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

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

Control Device Efficiency Restriction(s).

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

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

II. TESTING REQUIREMENTS.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

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

1. Test Date(s)

- a. For protocols, provide the proposed date on which testing will commence or "TBD"
- b. For reports, provide the first and last day of testing

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

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

4. Testing Requirements (all that apply)

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

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

**SECTION E Source Group Restrictions.**

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

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

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

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

Central Office
RA-EPstacktesting@pa.gov

Southeast Region
RA-EPSEstacktesting@pa.gov

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

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

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

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

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

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

(c) The stack test shall, at a minimum, test for VOC, NMOC, 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.

**SECTION E. Source Group Restrictions.**

- (d) At least thirty (30) days prior to the test, the Regional Air Quality Manager and the PSIMS Administrator in the Department's Central Office, shall be informed of the date and time of the test (see Condition #005).
- (e) Within sixty (60) days after the source test(s), one electronic and one hard copy, including all operating conditions, shall be submitted to the Regional Air Quality Manager and to the PSIMS Administrator in the Department's Central Office for approval (see Condition #005).
- (f) In the event that any of the above deadlines cannot be met, the permittee may request an extension for the due date(s) in writing and include a justification for the extension. The Department may grant an extension for a reasonable cause.

III. MONITORING REQUIREMENTS.**# 007 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

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

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

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

(b)

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

(ii) Secure any bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism must be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.

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

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

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

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

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

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

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

(b) The permittee shall calculate the VOC, NO_x, CO, SO₂, PM, PM₁₀ and PM_{2.5} emissions from each 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 each and from the combination of both enclosed flares, Source IDs C10 and C11 (when it is installed), on a 12-month rolling basis.

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

**SECTION E. Source Group Restrictions.**

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

IV. RECORDKEEPING REQUIREMENTS.**# 010 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall record the following when each flare is operating.

- (a) the hours of operation
- (b) the gas flow rate, every 15 minutes, in scfm
- (c) the CH₄ content and the device used for measurement
- (d) the field calibration check for the meter used to measure the methane content.
- (e) a detailed explanation for flare operation, including the equipment that was off-line and the reason for its unavailability.
- (f) the initial temperature set point of the flare and any change afterwards.

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

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

012 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

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

- (a) the heat input (MMBtu) to each flare
- (b) the hours of operation of each flare
- (c) VOC, NO_x, CO, SO₂, PM, PM₁₀ and PM_{2.5} emissions from each and from the combination of both enclosed flares, C10 and C11 (when it is installed).

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

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

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

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

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

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

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

**SECTION E Source Group Restrictions.**

- ii. Performance tests of each 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 each enclosed flare of the following data, as measured during the initial performance test or compliance determination:

- (i) The average combustion temperature measured at least every 15 minutes and averaged over the same time period as the performance test.
- (ii) The percent reduction of NMOC achieved by the flare, determined as specified in 40 C.F.R. 60.762(b)(2)(iii)(B), unless an alternative recordkeeping standard has been approved by the Administrator.

V. REPORTING REQUIREMENTS.

014 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

VI. WORK PRACTICE REQUIREMENTS.

015 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

016 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Each flare shall

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

017 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

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

- (a) The average operating temperature of either flare (C10 or C11 when it is installed) shall be, for each 3-hour period of operation, not more than 28C (50.4F) below the average combustion temperature measured during the most recent performance test, at which compliance with the emissions limitations in Conditions #001 and #004 of this section was demonstrated.
- (b) Based on the performance test of August 16, 2018, the permittee shall operate the C10 flare at a minimum of temperature of 1547°F(841.7°C), based on a 3-hour rolling average. This minimum temperature shall be maintained until superceded by another performance test or findings of the Department's Source Test Group's in its review of the August 16, 2018 stack test report.
- (c) The flare (C10 or C11 when it is installed) shall be allowed an appropriate warm up sequence as per manufacturer's specifications, to attain the minimum operating temperature.
- (d) Each flare shall be designed for a minimum retention time of 0.7 seconds at 1800 F.
- (e) The Department reserves the right to revise the operating temperature range of the flare, based on stack testing results or other information.

018 [25 Pa. Code §127.441]

Operating permit terms and conditions.

**SECTION E Source Group Restrictions.**

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 §127.441]**

Operating permit terms and conditions.

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

020 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

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

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

021 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

***** Permit Shield in Effect *****

**SECTION E. Source Group Restrictions.**

Group Name: SBR GROUP

Group Description: TK-5 and TK-6

Sources included in this group

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

I. RESTRICTIONS.**Emission Restriction(s).**

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

Throughput Restriction(s).

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (a) The permittee shall monitor the source daily for compliance with the flow rate limitation for this source.
- (b) The permittee shall monitor the Sequential Batch Reactor (SBR) daily for pH during the oxic phase.
- (c) The permittee shall calculate ammonia emissions from the SBR on a monthly and on a 12-month rolling basis.
- (d) The permittee shall calculate an average for the pH in the SBR during the oxic phase on a 30-day rolling basis.
- (e) The permittee shall calculate ammonia emissions from all sources of the leachate treatment plant, excluding the inactive crystallizers, on a monthly and 12-month rolling basis.

IV. RECORDKEEPING REQUIREMENTS.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

V. REPORTING REQUIREMENTS.

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

**SECTION E. Source Group Restrictions.****VI. WORK PRACTICE REQUIREMENTS.**

006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

VII. ADDITIONAL REQUIREMENTS.

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

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



SECTION F. Alternative Operation Requirements.

No Alternative Operations exist for this Title V facility.

**SECTION G. Emission Restriction Summary.**

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

Site Emission Restriction Summary

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



SECTION G. Emission Restriction Summary.

**SECTION H. Miscellaneous.**

March, 2020

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

In addition, listings and conditions from the GROWS permit 09-00007, for the following sources were included:

Sources 007, 011 - Sequential Batch Reactors

Source 500 - Exempt Emergency Generators

(B) Sources at the Leachate Treatment Plant include the Sequential Batch Reactors, Source IDs 007 and 011, and the following units which do not require additional limitations, monitoring or recordkeeping beyond the requirements in Section C:

Reactors, Clarifier, Evaporator, Centrifuge, and Filter Presses

Treatment Process tanks

Leachate Storage Tanks

Kerosene Heaters (600,000 Btu/hr)

Waste Oil Space Heater (225,000 Btu/hr)

Forced Air Heaters (340,000 Btu/hr)

Diesel Storage Tanks (1 - 1,000 gal and 1-275 gal.)

No.2 heating oil Tanks (1000,000 gal. ASTs)

Effluent Storage Tank (100,000 gal. AST)

Waste Oil Storage Tank (550 gal. AST)

Propane Powered Washer (657,000 Btu/hr)

Kerosene Storage Tank (2000 gal. AST)

(C) The following conditions were updated from Plan Approval 09-0210A. Condition numbers refer to the Condition Number for the April 14, 2015 issuance of the Plan Approval.

[Condition number in the Operating Permit is in brackets, if different]

Section C

Condition #006

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

Condition #009

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

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

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

Condition #015 [#018]

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

Condition #016

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

Condition #017 [#018]

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

Conditions #018, #019

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

Condition #020 [#022]

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

**SECTION H. Miscellaneous.****Condition #021 [#023]**

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

Condition #022 [#025]

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

Additional Conditions

The following standard DEP conditions, applicable or relevant to facilities with Operating Permits, or Title V permits were added:

*Recordkeeping of de minimis emissions increases

*The annual compliance certification and bi-annual deviation reporting

*Operation of sources according to good operating practices and according to manufacturer's specifications

*Application for a plan approval if excess emissions are observed from any source

*Prohibition of facility modifications without DEP approval, except for exceptions stated in Section B.

*Single source treatment for applicability analyses at GROWS, GROWS North and Fairless landfills was specified for consideration in future projects. The three landfills would be treated as one facility for applicability determinations including, but not limited to, the following air programs: non-attainment new source review (NNSR), prevention of significant deterioration (PSD), maximum achievable control technology (MACT) standards and, accidental release prevention program requirements.

With this Operating Permit, DEP determined that Fairless constitutes a separate facility from GROWS and GROWS North for determining applicability of NSPS 40 CFR Part 60, Subpart XXX and the National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills, 40 CFR Part 63, Subpart AAAA.

Condition #023

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

Section D**Source ID 110**

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

Condition #009 (b)

Condition #010

Condition #011

Condition #019

Condition #025 [#027]

Condition #026 [#028]

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

#002

#003

#004

#005

#008

#012

#015

#020

#021

#024 [026]

#027 [#029]

#031 [#032]

Condition #001

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

**SECTION H. Miscellaneous.**

limit for the Fairless landfill.

Condition #002 (1)

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

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

Condition #002(1)(A)

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

Condition #002(D)

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

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

Condition #003

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

(a) Nitrogen and oxygen required levels were removed.

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

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

Condition #004

The following change was made, in accordance with the applicability of 40 CFR Subpart XXX over Subpart WWW. In

(c)(i) methane concentration was added to the required monitoring recordkeeping, in addition to location.

Condition #005

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

Condition #007

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

Condition #008

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

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

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

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

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

Condition #012

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

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

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

**SECTION H. Miscellaneous.**

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

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

Condition #013

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

- *an annual calibration for the wellhead temperature measuring device

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

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

Condition #015

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

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

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

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

Condition #018

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

Condition #020

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

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

Condition #21

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

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

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

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

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

Condition #024 [#026]

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

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

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

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

Condition #027 [#029]

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

Condition #030

**SECTION H. Miscellaneous.**

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

Condition #031 [#032]

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

New Recordkeeping condition, in response to applicability of 40 CFR Part 60 Subpart XXX:

Requirements were added for monitoring and recording of bypasses of the treatment system as well as parameters that would assure optimal operation of the landfill gas treatment system.

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

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

- (1) If expected to take longer than 120 days
- (2) If not completed in 60 days.

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

Source ID C10, C11

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

Condition #001(b)

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

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

Condition #004

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

Condition #005

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

Condition #007

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

Additional Testing Condition

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

Conditions #009, #013

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

Condition #009(c)

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

Condition #007

**SECTION H. Miscellaneous.**

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

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

Condition #012 [#011]

The condition was clarified by including the name of the Section (Section E : Group Name:Flares).

Condition #018(b) [#017(b)]

The flare temperature is changed to a minimum of 1547°F, based on the performance testing for flare C10.

Condition #20 [#019]

The model designation and serial number of the flare were included in the identifying condition.

Condition #21 [#020]

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

Additional Additional Requirements Condition

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

Source ID 500

Condition #011 (09-00007)

The condition was revised to take into account the vacatur of May 2, 2016.

Section G

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



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



09-0210C

WASTE MGMT OF FAIRLESS/FAIRLESS LDFL



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

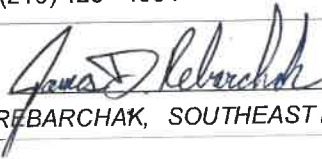
Name: BRIAN P BOLVIN PE

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

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

Section E. Source Group Restrictions

- E-I: Restrictions
- E-II: Testing Requirements
- E-III: Monitoring Requirements
- E-IV: Recordkeeping Requirements
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Section F. Alternative Operating Scenario(s)

- F-I: Restrictions
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SECTION A. Table of Contents

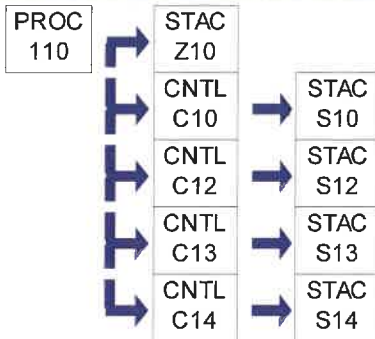
F-IV: Recordkeeping Requirements
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Section G. Emission Restriction Summary

Section H. Miscellaneous

**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 shutdown 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 shutdown 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 shutdown 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

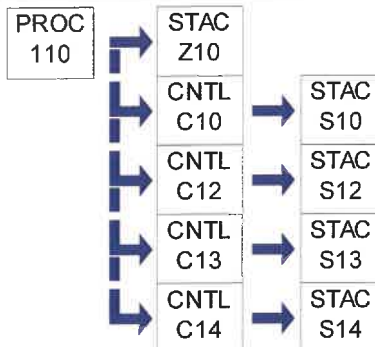
No compliance milestones exist.

**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/chief/cedri/index.html>). If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the owner or operator must submit the report to the Administrator at the appropriate address listed in §60.4 [Section C Condition #018]. Once the form has been available in CEDRI for 90 calendar days, the owner or operator must begin submitting all subsequent reports via CEDRI. The reports must be submitted by the deadlines specified in this subpart, regardless of the method in which the reports are submitted.

[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:

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

MNMOC = mass emission rate of NMOC, megagrams per year

QFLG = flow rate of landfill gas, cubic meters per minute

CNMOC = NMOC concentration, parts per million by volume as hexane

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

- (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 cross-section 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

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

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.

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

(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 superseded 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 *****



TAB 2

Expansion Permit



July 3, 2024

VIA E-MAIL: BBolvin@wm.com

Mr. Brian P. Bolvin, P.E.
Waste Management of Fairless, LLC
1000 New Ford Mill Road
Morrisville, PA 19067

Re: Major Permit Modification - Eastern Expansion
Fairless Landfill
Permit ID No. 101699
APS ID No. 688905, AUTH ID No. 1435430
Falls Township
Bucks County

Dear Mr. Bolvin:

The Pennsylvania Department of Environmental Protection (DEP) has reviewed your major permit modification application for a lateral expansion to the east of the existing disposal area (i.e., the "Eastern Expansion") of the Fairless Landfill, which was based upon a two-phase application No. 101699 (APS No. 688905, AUTH No. 1435430) that included the initial Phase I submission on March 16, 2022 and the Phase II submission on August 31, 2022, and subsequently revised on many occasions via supplemental written submittals and discussions. The Fairless Landfill is an active municipal waste landfill located in Falls Township, Bucks County. We have determined that you have satisfied all applicable requirements necessary to perform these activities. Therefore, we have issued the enclosed permit in accordance with Article V of the Solid Waste Management Act, 35 P.S. Sections 6018.101 et seq.

Compliance with the limitations and stipulations that have been set forth on your permit is mandatory. Nothing in this permit approval shall be construed to supersede, amend, or authorize violation of, the provisions of any valid and applicable Federal, State or local law, ordinance, or regulation, provided that said law, ordinance, or regulation is not preempted by the Pennsylvania Solid Waste Management Act, the Act of July 7, 1980, Act 97, 35 P.S. 6018.101 et seq. and Act 101, the Municipal Waste Planning, Recycling, and Waste Reduction Act.

Any person aggrieved by this action may appeal the action to the Environmental Hearing Board (Board) pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. § 7514, and the Administrative Agency Law, 2 Pa.C.S. Chapter 5A. The Board's address is:

Environmental Hearing Board
Rachel Carson State Office Building, Second Floor
400 Market Street
P.O. Box 8457
Harrisburg, PA 17105-8457

TDD users may contact the Environmental Hearing Board through the Pennsylvania Relay Service, 800.654.5984.

Appeals must be filed with the Board within 30 days of receipt of notice of this action unless the appropriate statute provides a different time. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

A Notice of Appeal form and the Board's rules of practice and procedure may be obtained online at <http://www.ehb.pa.gov> or by contacting the Secretary to the Board at 717.787.3483. The Notice of Appeal form and the Board's rules are also available in braille and on audiotape from the Secretary to the Board.

IMPORTANT LEGAL RIGHTS ARE AT STAKE. YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD AT 717-787-3483 FOR MORE INFORMATION. YOU DO NOT NEED A LAWYER TO FILE A NOTICE OF APPEAL WITH THE BOARD.

IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST BE FILED WITH AND RECEIVED BY THE BOARD WITHIN 30 DAYS OF RECEIPT OF NOTICE OF THIS ACTION.

If you have any question about the enclosed permit or requirements of the Solid Waste Management Act, please contact Dr. Mohamad Mazid, Chief, Technical Services, by e-mail at mmazid@pa.gov or by telephone at 484.250.5768.

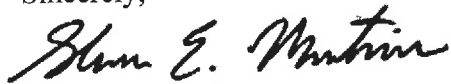
Mr. Brian P. Bolvin, P.E.

- 3 -

July 3, 2024

Thank you for your cooperation.

Sincerely,



Shawn Mountain
Environmental Program Manager
Waste Management Program

Enclosure: Permit Modification

cc: Mr. Takita – Falls Township (w/enclosure)
Ms. Kostick – Bucks County Health Department (w/enclosure)
Mr. Whitty, P.E. – Golder Associates Inc. (w/enclosure)
Mr. Adams, P.E. – Golder Associates Inc. (w/enclosure)
Mr. Fees (w/enclosure)
Ms. Singh (w/enclosure)
Mr. Bauer (w/enclosure)
Dr. Mazid, P.E. (w/enclosure)
Mr. Bower (w/enclosure)
Dr. Ou, P.E. (w/enclosure)
Re 30 (hmw24wm)185-2

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENTPermit
For
Solid Waste Disposal and/or Processing Facility
FORM NO. 8

Permit No. 101699
Date Issued July 3, 2024
Date Expired March 30, 2026

Under the provisions of the Pennsylvania Solid Waste Management Act of July 7, 1980, Act 97, a permit for a solid waste disposal and/or processing facility at (municipality) Falls Township in the County of Bucks is

granted to (applicant) Waste Management of Fairless, LLC

(address) 1000 New Ford Mill Road

Morrisville, PA 19067

This permit is applicable to the facility named as Fairless Landfill and described as:

Latitude 40°, 09', 11"

Longitude - 74°, 45', 33"

This permit is subject to modification, amendment, and supplement by the Department of Environmental Protection (DEP) and is further subject to revocation or suspension by DEP for any violation of the applicable laws or the rules and regulations adopted thereunder, for failure to comply in whole or in part with the conditions of this permit and the provisions set forth in the application No. 101699 which is made a part hereof, or for causing any condition inimical to the public health, safety, or welfare.

See Attachment for waste limitations and/or special conditions.



FOR THE DEPARTMENT OF
ENVIRONMENTAL PROTECTION

THIS PERMIT IS NON - TRANSFERABLE

Page 1 of 61

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

**Permit
For
Solid Waste Disposal and/or Processing Facility
FORM NO. 8**

Permit No.	101699
Date Issued	July 3, 2024
Date Expired	March 30, 2026

AUTHORIZATION

1. The solid waste management permit is amended based upon a two-phase major permit modification application No. 101699 (APS No. 688905, AUTH No. 1435430) that was received in the Southeast Regional Office of the Pennsylvania Department of Environmental Protection (DEP). This amended permit provides for a lateral expansion to the east of the existing disposal area (hereinafter referred to as "Eastern Expansion") of the Fairless Landfill, which is an active municipal waste landfill located in Falls Township, Bucks County. The initial Phase I submission was received on March 16, 2022, and the Phase II submission was received on August 31, 2022. This application also includes a response document to DEP's March 15, 2023, comment letter that was received on March 21, 2023.

The Fairless Landfill currently consists of 330.5 acres of permitted area, of which 197 acres is waste disposal area. The area for the Eastern Expansion is on an additional 63.5-acre property previously owned by United States Steel Corporation (USS) and Gamesa Wind US, LLC, which was purchased by Waste Management of Fairless, LLC (WMF) from NP Falls Township Industrial, LLC (NP) on December 30, 2021. The new disposal area will cover a total of approximately 63.9 acres that includes a portion within the current permit boundary, as well as a parcel of 5.3 ± acres that had received Relief of Liability (ROL) from DEP under the PA Land Recycling and Environmental Remediation Standards Act (i.e., Act 2).

The Eastern Expansion area will be adjacent to the currently permitted disposal area of Cells 4, 6, 8, 9, 10, 11, 12 and 13 of Fairless Landfill, which will be surrounded on the western perimeter of the expansion area by Mechanically Stabilized Earth (MSE) berms. The permitted average and maximum daily waste acceptance rates will be kept without change at 18,333 and 20,000 tons per day (TPD), respectively. The operational hours for the Fairless Landfill will not change either. The waste from the expansion will piggyback onto the east side of the current landfill and the expansion will have an additional disposal capacity of approximately 23.8 million bank cubic yards (BCY). The final peak elevation for Fairless Landfill, including the Eastern Expansion, will increase from the previously permitted peak elevation at 294 feet to approximately peak elevation at 357 feet above mean sea level (msl).

The approved application consists of the following documents (unless otherwise noted, received and revised refer to the dates documents were received by DEP and not necessarily the dates of the documents themselves):

THIS PERMIT IS NON - TRANSFERABLE

Page 2 of 61

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

**Permit
For
Solid Waste Disposal and/or Processing Facility
FORM NO. 8**

Permit No.	101699
Date Issued	July 3, 2024
Date Expired	March 30, 2026

Phase I

General Information Form (GIF), received on March 16, 2022
 Form A – Application for Municipal or Residual Waste Permit, received on March 16, 2022
 Form B – Professional Certification, received on March 16, 2022
 Form B1 – Application Form Certification, revised on March 16, 2022
 Form MRW-C – Identification of Interests and Compliance History, received on March 16, 2022
 Form D – Environmental Assessment Process for Municipal and Residual Waste Management Facilities, received on March 16, 2022
 Form E – Contractual Consent of Landowner, received on March 16, 2022
 Form F – Soils Information - Phase I, received on March 16, 2022
 Form 1 – Facility Plan, received on March 16, 2022
 Form 2 – Map Requirements - Phase I, received on March 16, 2022
 Form 6 – Geologic Information - Phase I, received on March 16, 2022
 Form 7 – Hydrogeologic Information - Phase I, received on March 16, 2022
 Form 8 – Baseline Ground Water Analyses - Phase I, received on March 16, 2022
 Form 11 – Mineral Deposits Information - Phase I, received on March 16, 2022
 Form 12 – Alternative Water Supply - Phase I, received on March 16, 2022

Figure D.B-1 – Site Location Map, Rev. 0, received on March 16, 2022
 Figure D.B-2 – Exclusionary Criteria Map, Rev. 0, received on March 16, 2022
 Figure D.B-3 – Environmental Assessment Map, Rev. 0, received on March 16, 2022
 Figure 1 – Site Location Map, received on March 16, 2022
 Figure 2 – Aerial Photograph, received on March 16, 2022
 Figure 3 – Proposed Fairless Landfill Eastern Expansion Permit Boundary, received on March 16, 2022
 Figure 2.B-1 – Base Topographic Map (Sheet 1 of 4), Rev. 0, received on March 16, 2022
 Figure 2.B-2 – Base Topographic Map (Sheet 2 of 4), Rev. 0, received on March 16, 2022
 Figure 2.B-3 – Base Topographic Map (Sheet 3 of 4), Rev. 0, received on March 16, 2022
 Figure 2.B-4 – Base Topographic Map (Sheet 4 of 4), Rev. 0, received on March 16, 2022
 Figure 6.B-1 – Site Location Map, Rev. 0, received on March 16, 2022
 Figure 6.B-2 – Aerial Photograph Present Day Site Features, Rev. 0, received on March 16, 2022
 Figure 6.B-3 – Pre-Development 1938 Aerial Photograph, Rev. 0, received on March 16, 2022
 Figure 6.B-4 – Historic Investigations Location Map, Rev. 0, received on March 16, 2022
 Figure 6.B-5 – Phase 1 Study Area Map, Rev. 0, received on March 16, 2022
 Figure 6.B-6 – Regional Surficial Geology, Rev. 0, received on March 16, 2022

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Figure 6.B-7 – Regional Stratigraphy, Rev. 0, received on March 16, 2022
 Figure 6.B-8 – Geologic Cross Sections A-A' and B-B', Rev. 0, received on March 16, 2022
 Figure 6.B-9 – Geologic Cross Sections C-C', D-D', E-E' and F-F', Rev. 0, received on March 16, 2022
 Figure 6.B-10 – Topographic Contours of Saprolite-Bedrock Surface, Rev. 0, received on March 16, 2022
 Figure 6.B-11 – Topographic Contours of Upper Clay, Rev. 0, received on March 16, 2022
 Figure 6.B-12 – Generalized Geologic Site Model, Rev. 0, received on March 16, 2022
 Figure 7.B-1 – Site Location Map, received on March 16, 2022
 Figure 7.B-2 – Phase I Study Area Map, received on March 16, 2022
 Figure 7.B-3 – Site and Regional Hydrostratigraphy, received on March 16, 2022
 Figure 7.B-4 – Regional Groundwater Flow Directions Upper Aquifer, received on March 16, 2022
 Figure 7.B-5 – Regional Sayreville Sand Aquifer Potentiometric Surface Map, received on March 16, 2022
 Figure 7.B-6 – Quaternary Aquifer Groundwater Contour Map, received on March 16, 2022
 Figure 7.B-7 – Sayreville Sand Aquifer Potentiometric Surface Map, received on March 16, 2022
 Figure 7.B-8 – Hydrogeologic Cross Sections A-A' and B-B', received on March 16, 2022
 Figure 7.B-9 – Hydrogeologic Cross Sections C-C', D-D', E-E and F-F', received on March 16, 2022
 Figure 7.B-10 – Quaternary Aquifer Composite High Groundwater Surface Contour Map, received in August 2022
 Figure 7.B-11 – Conceptual Hydrogeologic Site Model, received on March 16, 2022
 Figure 7.B-12 – Proposed Permanent Groundwater Monitoring Network, received on March 16, 2022
 Figure 11.B-1 – Land Use and Reclamation Map, received on March 16, 2022
 Figure 12.B-1 – Well Survey Map, received on March 16, 2022

Phase II

General Information Form (GIF), received on August 31, 2022
 Form B – Professional Certification, received on August 31, 2022
 Form B1 – Application Form Certification, received on August 31, 2022
 Form G (A) – Air Resources Protection Dust Emissions Estimate and Control Plan, received on August 31, 2022
 Form G (B) – Air Resources Protection NMOC Emissions Estimate and Control Plan, received on August 31, 2022
 Form H – Revegetation, received on August 31, 2022
 Form I – Soil Erosion and Sedimentation Controls, received on August 31, 2022

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From J – Soils Information – Phase II, received on August 31, 2022
 Form K – Gas Management, received on August 31, 2022
 Form L – Contingency Plan for Emergency Procedures, received on August 31, 2022
 Form Q – Request for Equivalency Review, received on August 31, 2022
 Form R – Waste Analysis and Classification Plan, received on August 31, 2022
 Form X – Radiation Protection Action Plan, received on August 31, 2022
 Form 3 – Map Requirements – Phase II, received on August 31, 2022
 Form 14 – Operation Plan, received on August 31, 2022
 Form 18 – Water Quality Monitoring System – Phase II, received on August 31, 2022
 Form 24 – Liner System – Phase II, received on August 31, 2022
 Form 25 – Leachate Management – Phase II, received on August 31, 2022
 Form 28 – Closure, received on August 31, 2022
 Form 45 – Protection of Capacity, received on August 31, 2022
 Form 46 – Relationship Between Municipal Waste Management Plans and Permit, received on August 31, 2022
 Bonding Worksheets received on August 31, 2022 and updated on May 23, 2024; Refer to Form 28 and the Bonding Worksheets for the largest open area for which a bond will be posted.

Figure 14-1, Nuisance Minimization and Control Plan Inventory Map, Rev. 0, received on August 31, 2022
 Figure 18-1, Proposed Permanent Groundwater Monitoring Network – Upper (Quaternary) Aquifer, Rev. 0, received on August 31, 2022;
 Figure 18-2, Proposed Permanent Groundwater Monitoring Network – Deep (Sayreville Sand) Aquifer, Rev. 0, received on August 31, 2022
 Figure X-1, Radiation Protection Plan, Rev. 0, received on August 31, 2022

Drawings that incorporate the Eastern Expansion Modification to the Existing Fairless Landfill:

Drawing A-00, Cover Sheet, Rev. 0, received on August 31, 2022
 Drawing A-01 Existing Facilities Plan, Rev. 0, received on August 31, 2022
 Drawing A-02 Existing Site Conditions Plan, Rev. 0, received on August 31, 2022
 Drawing A-03 Underground Utilities and Structures Relocation, Removal, and Backfilling Plan, Rev. 0, received on August 31, 2022
 Drawing A-04 Subbase Plan, Rev. 0, received on August 31, 2022
 Drawing A-05 Top of Protective Cover Plan, Rev. 0, received on August 31, 2022

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Drawing A-06 Landfill Phase No. 1, Rev. 0, received on August 31, 2022
Drawing A-07 Landfill Phase No. 2, Rev. 0, received on August 31, 2022
Drawing A-08 Landfill Phase No. 3, Rev. 0, received on August 31, 2022
Drawing A-09 Landfill Phase No. 4, Rev. 0, received on August 31, 2022
Drawing A-10 Landfill Phase No. 5, Rev. 0, received on August 31, 2022
Drawing A-11 Landfill Phase No. 6, Rev. 0, received on August 31, 2022
Drawing A-12 Landfill Phase No. 7, Rev. 0, received on August 31, 2022
Drawing A-13 Final Development Plan, Rev. 0, received on August 31, 2022
Drawing A-14 Landfill Cross Sections (Sheet 1 of 5), Rev. 0, received on August 31, 2022
Drawing A-15 Landfill Cross Sections (Sheet 2 of 5), Rev. 0, received on August 31, 2022
Drawing A-16 Landfill Cross Sections (Sheet 3 of 5), Rev. 0, received on August 31, 2022
Drawing A-17 Landfill Cross Sections (Sheet 4 of 5), Rev. 0, received on August 31, 2022
Drawing A-18 Landfill Cross Sections (Sheet 5 of 5), Rev. 0, received on August 31, 2022
Drawing A-19 Cell 4 Leachate Riser Extension Plan and Profile, Rev. 0, received on August 31, 2022
Drawing A-20 Cell 6 Leachate Riser Extension Plan and Profile, Rev. 0, received on August 31, 2022
Drawing A-21 Cell 8 Leachate Riser Extension Plan and Profile, Rev. 0, received on August 31, 2022
Drawing A-22 Leachate Riser Extension Details (Sheet 1 of 2), Rev. 0, received on August 31, 2022
Drawing A-23 Leachate Riser Extension Details (Sheet 2 of 2), Rev. 0, received on August 31, 2022
Drawing A-24 Leachate Storage Tank Impoundment Plan, Rev. 0, received on August 31, 2022
Drawing A-25 Leachate Storage Tank Details (Sheet 1 of 2), Rev. 0, received on August 31, 2022
Drawing A-26 Leachate Storage Tank Details (Sheet 2 of 2), Rev. 0, received on August 31, 2022
Drawing A-27 Liner System Details (Sheet 1 of 3), Rev. 0, received on August 31, 2022
Drawing A-28 Liner System Details (Sheet 2 of 3), Rev. 0, received on August 31, 2022
Drawing A-29 Liner System Details (Sheet 3 of 3), Rev. 0, received on August 31, 2022
Drawing A-30 Cells 14 and 15 Leachate Detection and Collection Sump Plan, Rev. 0, received on August 31, 2022
Drawing A-31 Leachate Collection Sump, Sections and Details, Rev. 0, received on August 31, 2022
Drawing A-32 Leachate Collection System Details (Sheet 1 of 2), Rev. 0, received on August 31, 2022
Drawing A-33 Leachate Collection System Details (Sheet 2 of 2), Rev. 0, received on August 31, 2022
Drawing A-34 Leachate Riser House Details (Sheet 1 of 2), Rev. 0, received on August 31, 2022
Drawing A-35 Leachate Riser House Details (Sheet 2 of 2), Rev. 0, received on August 31, 2022
Drawing A-36 Sedimentation Basin No. 1 Modifications, Rev. 0, received on August 31, 2022
Drawing A-37 Sedimentation Basin No. 2 Modifications, Rev. 0, received on August 31, 2022
Drawing A-38 Erosion and Sedimentation Control Details (Sheet 1 of 5), Rev. 0, received on August 31, 2022

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Drawing A-39 Erosion and Sedimentation Control Details (Sheet 2 of 5), Rev. 0, received on August 31, 2022
Drawing A-41 Erosion and Sedimentation Control Details (Sheet 4 of 5), Rev. 0, received on August 31, 2022
Drawing A-42 Erosion and Sedimentation Control Details (Sheet 5 of 5), Rev. 0, received on August 31, 2022
Drawing A-43 Mechanically Stabilized Earth (MSE) Berm Details, Rev. 0, received on August 31, 2022
Drawing A-44 Eastern Expansion Gas Well and Header Location Plan, Rev. 0, received on August 31, 2022
Drawing A-45 Gas System Details (Sheet 1 of 4), Rev. 0, received on August 31, 2022
Drawing A-46 Gas System Details (Sheet 2 of 4), Rev. 0, received on August 31, 2022
Drawing A-47 Gas System Details (Sheet 3 of 4), Rev. 0, received on August 31, 2022
Drawing A-48 Gas System Details (Sheet 4 of 4), Rev. 0, received on August 31, 2022
Drawing A-49 Temporary Cap Details, Rev. 0, received on August 31, 2022
Drawing A-50 Drainage Area Plan, Rev. 0, received on August 31, 2022

SETTLEMENT ACCOMODATION PLAN Drawings:

SAP-01 Pre-Settlement Waste Grades – Waste Placement Plan, Rev. 0, received on August 31, 2022
SAP-02 Final Development Plan, Rev. 0, received on August 31, 2022
SAP-03 Capping Schedule, Rev. 0, received on August 31, 2022
SAP-04 Cross Section Sheet 1 of 6, Rev. 0, received on August 31, 2022
SAP-05 Cross Section Sheet 2 of 6, Rev. 0, received on August 31, 2022
SAP-06 Cross Section Sheet 3 of 6, Rev. 0, received on August 31, 2022
SAP-07 Cross Section Sheet 4 of 6, Rev. 0, received on August 31, 2022
SAP-08 Cross Section Sheet 5 of 6, Rev. 0, received on August 31, 2022
SAP-09 Cross Section Sheet 6 of 6, Rev. 0, received on August 31, 2022

This permit has incorporated the following major and minor permit modifications approved by DEP since last facility's permit issuance on March 30, 2016:

- The permit was amended on January 19, 2017, based upon a minor permit modification application (AUTH No. 1137110), which was received at DEP on May 9, 2016. This amended permit approved design enhancements to the Bordentown Road and Dock Road intersection and associated stormwater improvements within the Fairless Landfill permit boundary.

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- The permit was amended on September 25, 2017, based upon a minor permit modification application (AUTH No. 1195392), which was received at DEP on August 18, 2017. This amended permit approved changes to the phasing at the Fairless Landfill to include Cells 7 and 8 to be constructed and in operation as part of Phase I construction sequence and before the mechanically stabilized earth (MSE) berm is constructed around Cells 1 and 2 of the landfill.
- The permit was amended on January 31, 2018, based upon a minor permit modification application (AUTH No. 1195275), which was received at DEP on August 17, 2017. This amended permit approved the use of geosynthetic tarps as an alternative daily cover material (ADCM) at the Fairless Landfill.
- The permit was amended on May 29, 2018, based upon a minor permit modification application (AUTH No. 1169839), which was received at DEP on February 13, 2017. This amended permit approved the request to modify the geosynthetic specifications for the liner and final cover systems, as well as the Construction Quality Assurance Plan and construction-related design details at the Fairless Landfill.
- The permit was amended on September 26, 2018, based upon a minor permit modification application (AUTH No. 1207342), which was received at DEP on November 16, 2017. This amended permit approved the Settlement Accommodation Plan (SAP) for the Fairless Landfill to incorporate new landfill elevations and grades developed in accordance with the Standard Operating Procedures (SOP) for SAP.
- The permit was amended on August 30, 2018, based upon a minor permit modification application (AUTH No. 1213916), which was received at DEP on January 17, 2018. This amended permit approved the request to modify design details, including thickness of the upper layer of subgrade, pipe size of leachate forcemain, connection location of final cover geomembrane to primary liner, and permeability testing frequency for the primary source of protective cover aggregates, at the Fairless Landfill.
- The permit was amended on September 26, 2018, based upon a minor permit modification application (AUTH No. 1237001), which was received at DEP on July 3, 2018. This amended permit approved an alternative design for the perforation pattern of the PVC leachate collection pipes at the Fairless Landfill.

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- The permit was amended on May 29, 2019, based upon a major permit modification application (AUTH No. 1173348), which was received at DEP on March 10, 2017, and responses received from Waste Management of Fairless, LLC (WMF) on November 22, 2017, March 16, 2018, and March 21, 2019. This amended permit approved the requests to include vehicular transportation of leachate and Reverse Osmosis concentrate (i.e., brine) generated by the Fairless Landfill's Leachate Treatment Plant (LTP).
- The permit was amended on February 7, 2020, and updated on March 5, 2020, based upon a major permit modification application (AUTH No. 1272518), which was received at the DEP on March 19, 2019, and responses received from WMF on September 30, 2019, October 28, 2019, and November 5, 2019. This amended permit approved the requests to install three (3) Ultra Low Emission flares (ULE Flare System) and two (2) emergency generator engines, that are located in an area immediately west of the Fairless Landfill but within the permit boundary of GROWS Landfill, as a primary control for landfill gas generated by the Fairless Landfill, GROWS Landfill, and GROWS North Landfill. The new ULE flare system provides a landfill gas control solution for the Fairless Landfill upon the May 2020 scheduled shutdown of the Exelon Fairless Generating Station, which was used to accept and process landfill gases from all nearby landfills.
- The permit was amended on April 24, 2020, based upon a major permit modification application (AUTH No. 1270348), which was received at DEP on March 13, 2019, and a subsequently received addendum on October 2, 2019. This amended permit approved the new configuration and layout of Cells 9 through 13 to replace the previously approved Cells 9 through 14, as well as the new design and layout of the MSE berm along the new Cells 9 through 13 on the eastern perimeter of the existing Fairless Landfill. In addition, stripping, removing or re-using of soil that was used as daily cover but previously prohibited of such actions, are hereby accepted.
- The permit was amended on January 11, 2021, based upon a minor permit modification application (AUTH No. 1324004), which was received at DEP on August 12, 2020. This amended permit approved the request to replace existing Monitoring Wells GFD-5S and GFD-13S, in order to correct typical cementitious grout impacts upon these two monitoring wells at the Fairless Landfill.

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- The permit was amended on June 30, 2021, based upon a minor permit modification application (AUTH No. 1331961), which was initially received at DEP on August 12, 2020, and supplemental information were subsequently received in responding to DEP's comments and discussions, on January 5 and May 6, 2021, via emails. This amended permit approved the requests to modify the monitoring of the MSE perimeter berms' foundation and mass movement during and after the construction by inclinometers that will be installed at the toe of and through the MSE berms for Cells 9 through 13 of the Fairless Landfill.
- The permit was amended on December 2, 2021, based upon a minor permit modification application (AUTH No. 1365114), which was received at DEP on August 5, 2021. This amended permit approved the revised phasing request for Cells 10 through 13 in order to delay construction of the mechanically stabilized earth (MSE) berm along the eastern side to northeast corner of Fairless Landfill with a temporary berm to accommodate interim landfill phasing.
- The permit was amended on January 28, 2022, based upon a minor permit modification application (AUTH No. 1363940), which was received at DEP on July 23, 2021. This amended permit approved the new trailer Drop and Swap Area and permit boundary change for Fairless Landfill to incorporate the Ultra Low Emission (ULE) Flare area behind the Pennsbury Plant, that was formerly within the GROWS Landfill permit boundary, into Fairless Landfill permit boundary.
- The permit was amended on January 28, 2022, based upon a minor permit modification application (AUTH No. 1376218), which was received at DEP on November 12, 2021. This amended permit approved the use of automobile shredder residue (ASR), through equivalency process, as an ADCM at the Fairless Landfill.
- The permit was amended on February 24, 2022, based upon a minor permit modification application (AUTH No. 1361218), which was initially received at DEP on June 25, 2021, and further modification on February 24, 2022. This amended permit approved a revised Settlement Accommodation Plan (SAP) for the Fairless Landfill to incorporate pre-settlement landfill elevations and grades to up to 10% maximum of the post-settlement waste thickness that have been developed in accordance with the Standard Operating Procedures (SOP) for SAP (i.e., the SAP Guidelines), issued by DEP and revised September 14, 2014.

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- The permit was amended on June 13, 2022, based upon a minor permit modification application (AUTH No. 1376769), which was initially received at DEP on November 12, 2021, and further modified on March 11, 2022. This amended permit approved the use of alternate configurations for the vertical channels (i.e. down chutes), which include alternate channel linings and modified channel geometries on the final cover at Fairless Landfill.
- The permit was amended on November 7, 2022, based upon a major permit modification application (AUTH No. 1392954), which was initially received at the DEP on April 13, 2022, and response documents subsequently received on September 12, 2022 and November 7, 2022. The amended permit approved the use of Reclaimed Asphalt Pavement (RAP) material as an acceptable component within the Mechanically Stabilized Earth (MSE) berms and other perimeter berms. This permit modification also approved alternative construction of an earthen berm on the eastern perimeter of Cells 10-13 and a modification in the permit boundary to accommodate the increased footprint of the exterior side of the earthen berm within the proposed Eastern Expansion area at the Fairless Landfill.
- The permit was amended on February 15, 2024, based upon a minor permit modification application (AUTH No. 1461724), which was received at the DEP on November 13, 2023. The amended permit approved the proposed alternative to the final cover material specifications for the Fairless Landfill.
- The permit was amended on May 23, 2024, based upon a major permit modification application (AUTH No. 1445312), which was initially received at DEP on June 16, 2023, and supplemental information regarding permit conditions received via emails through April 24, 2024. The amended permit approved the request for the transmission of landfill gas (LFG) that is collected from the Fairless Landfill to the Fairless Renewable Natural Gas (RNG) Plant, a new off-site landfill gas (LFG) processing facility permitted under the General Permit WMGM055SE001 that was issued to Waste Management Renewable Energy, LLC (WMRE) on August 3, 2023.

The contents of all the above listed documents are hereby incorporated in the permit as conditions with which the permittee must comply. Where the terms or conditions of this permit differ from the documents incorporated by reference, the terms or conditions of this permit shall govern.

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2. Nothing in this permit shall be construed to supersede, amend, or authorize violation of, the provisions of any valid and applicable local law, ordinance, or regulation, provided that said local law, ordinance, or regulation is not preempted by the Pennsylvania Solid Waste Management Act, the Act of July 7, 1980, Act 97, 35 P.S. 6018.101 et seq. and Act 101, the Municipal Waste Planning, Recycling, and Waste Reduction Act.
3. As a condition of this permit, and of the permittee's authority to conduct the activities authorized by this permit, the permittee hereby authorizes and consents to allow authorized employees or agents of DEP, without advanced notice or a search warrant, upon presentation of appropriate credentials, and without delay, to have access to and to inspect all areas on which solid waste management activities are being or will be conducted. The authorization and consent shall include consent to collect samples of waste, water or gases, to take photographs, to perform measurements, surveys and other tests, to inspect any monitoring equipment, to inspect the methods of operation, and to inspect and/or copy documents, books, or papers required by DEP to be maintained. This permit condition is referenced in accordance with Section 608 and 610(7) of the Solid Waste Management Act, 35 P.S. Sections 6018.608 and 6018.610(7). This condition in no way limits any other powers granted under the Solid Waste Management Act.
4. Form 37, Certification of Facility Construction Activity, is to be submitted to the Regional Solid Waste Manager in DEP's Southeast Regional Office for review after each cell of the landfill is constructed, including the subbase preparation (includes MSE wall construction and structural fill placement to establish grades in advance of construction of the subbase itself), preparation of the witness zone, installation of the primary liner, installation of the leachate collection pipes, and the preparation of the protective layer for the primary liner prior to the start of landfilling operations. Waste disposal operations may not commence in a cell until DEP has accepted, in writing, the certification report(s) for all that cell's components. All certification reports shall identify and explain deviations from the design approved in this permit.
5. Form 37, Certification of Facility Construction Activity, including as-built reports for all construction and closure activities related to the landfill, is to be submitted to the Regional Solid Waste Manager in DEP's Southeast Regional Office for review after the construction of the following major construction activities as these activities are completed in part or in total, including the installation of the groundwater monitoring systems, landfill liner systems, leachate management systems, landfill final cover, landfill gas management systems, major access roads, stormwater management structures, and closure and final closure activities. All certification reports shall identify and explain deviations from the design approved

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in this permit. Systems and structures that are the subject of the certification submittal shall not be utilized until DEP has accepted, in writing, the certification submittal.

OPERATIONS AND REPORTING

6. A daily operational record is to be maintained in accordance with Section 273.311 of the Municipal Waste Rules and Regulations.
7. A quarterly operations report is to be submitted on or before the 20th day of April, July, October, and January for the three-month period ending the last day of March, June, September, and December in accordance with Section 273.312 of the Municipal Waste Rules and Regulations.
8. An Annual Operations Report is to be submitted to DEP's Southeast Regional Office on or before June 30 of each year in accordance with the format indicated in Chapter 273.312 of the Municipal Waste Rules and Regulations. The annual report submitted to DEP is to be accompanied by the annual permit administrative fee.
9. An annual topographic survey is to be conducted and is to be submitted to the Southeast Regional Office concerning the elevation and total volume of area that has been filled. This is due as part of the Annual Operations Report due on June 30 of each year.
10. Since both the GROWS North and the Tullytown Resource Recovery Facility Landfills have had permanently ceased waste acceptance, no more than 20,000 tons of solid waste may be received at the Fairless Landfill for disposal on any single operating day. This figure represents the maximum daily volume (MDV) of the facility, set pursuant to Section 1112 of the Municipal Waste Planning, Recycling, and Waste Reduction Act, 53 P.S. Section 1112 (Act 101 of 1988) and the regulation of DEP. The permittee is advised that this section also provides that a mandatory civil penalty of \$100 per ton applies to any excess volume received for disposal at this facility for any reason. When the Fairless Landfill, the GROWS North Landfill, and/or the Tullytown Resource Recovery Facility Landfill, or any combination thereof, accept waste on a given day, the 20,000 tons per day MDV shall be shared amongst the operating landfills and the MDV of each individual landfill, when totaled together for that day, shall not exceed 20,000 tons in total for that day.

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11. No more than an average of 18,333 tons of solid waste may be received at the Fairless Landfill for disposal per operating day during the standard calendar year quarter. This figure represents the ADV of the facility, set pursuant to Section 1112 of the Municipal Waste Planning, Recycling, and Waste Reduction Act, 53 P.S. Section 1112 (Act 101 of 1988) and the regulation of DEP. The permittee is advised that this section also provides that a mandatory civil penalty of \$100 per ton applies to any excess volume received for disposal at this facility for any reason. Since the Fairless Landfill has replaced the disposal capacity of the GROWS North Landfill, the Tullytown Resource Recovery Facility Landfill, or any combination thereof, waste acceptance ADV during a calendar quarter, shall not exceed 18,333 tons in total for that quarter.
12. Waste acceptance, compliance with Condition 11, above, shall be calculated by taking the total tons of solid waste received for disposal at the Fairless Landfill during a standard calendar year quarter, divided by the number of days during the quarter that the facility was permitted to operate, including partial days.
13. The Fairless Landfill is permitted to accept waste for disposal Monday through Saturday from 2 a.m. to 8 p.m. (scale gate hours). Operations other than waste acceptance, construction operations in particular, shall be conducted and/or scheduled to minimize nuisances to the greatest extent possible. Operations may be extended due to extreme weather conditions in accordance with the following procedure. Prior to extending operations, justification for such an extension must be mailed or faxed to the Waste Management Program Manager or a designee. Written concurrence that the extension is justifiable needs to be received by the permittee from the manager or designee before extended operations may be implemented. All other requests to extend operating hours must be requested in advance of need and be approved, in writing, in advance by DEP. Records documenting the compliance with the above-approved hours shall be provided in the facility's daily, quarterly, and annual reports.
14. Except to the extent this permit provides otherwise, the permittee shall conduct solid waste management activities as described in the approved application. The permittee shall file an application for a permit modification with DEP and shall receive approval from DEP prior to receiving any waste volumes in excess of the maximum or average daily volume stated in the permit.
15. a. This facility may not operate to receive waste unless the operator has established at least one drop-off center for the collection or sale of at least three recyclable materials chosen from the following: clear glass, colored glass, aluminum, steel and bimetallic cans, high-grade office paper, newsprint, corrugated paper, and plastics. The drop-off center must be located at the facility or at a location

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

**Permit
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that is easily accessible to substantial numbers of persons generating municipal waste that is processed or disposed of at the facility. The drop-off center shall be operated in compliance with Section 1502(b) of the Municipal Waste Planning, Recycling, and Waste Reduction Act, 53 P.S. Section 4000.1502(b).

- b. The drop-off center shall be located at the facility or in a place that is easily accessible to persons generating municipal waste that is processed or disposed at the facility.
 - c. The drop-off center shall contain bins or containers where recyclable materials may be placed and temporarily stored. If the operation of the drop-off center requires attendants, the center shall be open at least eight hours per week, including four hours during evenings or weekends.
 - d. Once every six months, the operator shall provide public notice of the availability of the drop-off center. The operator shall place an advertisement in a newspaper circulating in the municipality or provide notice in another manner approved by DEP in writing.
 - e. On or before February 15 of each year, the operator shall inform the host municipality, in writing, of the weight and type of materials that were recycled in the previous calendar year, so that the host municipality may comply with the requirements of Section 304(f) of the Municipal Waste Planning, Recycling, and Waste Reduction Act.
16. The permittee shall not act in a manner contrary to any Municipal Waste Management Plan approval by DEP pursuant to the Municipal Waste Planning, Recycling, and Waste Reduction Act, nor shall the permittee fail to act in a manner that is consistent with any Municipal Waste Plan approved by DEP pursuant to that Act.
17. The permittee shall not violate, or cause or assist in the violation of any provision of the Municipal Waste Planning, Recycling, and Waste Reduction Act, 53 P.S. Sections 4000.101 et seq., or the terms or conditions of any Municipal Waste Management Plan approved by DEP under that Act.
18. The permittee shall not allow solid waste generated outside the host county of the permitted facility to be received, disposed, or otherwise managed at the facility if the transportation to, or management at, the facility would violate applicable laws in effect in the county or state in which the waste was generated, or state or local solid waste management plan in effect where the waste was generated.

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19. This facility may not accept for disposal, or for processing, truckloads composed primarily of leaf waste.
20. No lead acid batteries shall be placed into mixed waste or be disposed of at this facility.
21. Form 19, Quarterly and Annual Groundwater Analysis Form, must be submitted in duplicate for the quarterly and annual testing of monitoring well numbers: GFD-1S, GFD-2S, GFD-3S, GFD-4S, GFD-5SR, GFU-6S, GFU-7S, GFU-8S, GFD-9S, GFD-10S, GFD-11S, GFD-12S, GFD-13SR, GFU-6D, GFD-1DR, and GFD-4D. The sampling is to be performed on a quarterly basis for analysis, and the analytical data for all parameters shall be submitted to DEP within 60 days of the date the last well is sampled for each quarterly sampling event, which ends on March 31, June 30, September 30, and December 31, respectively. Monitoring well data is to be submitted to the Lower Bucks Joint Municipal Water Authority and Aqua PA at the same time the data is submitted to DEP. Two quarters of overlapping sampling events shall be conducted with respect to all monitoring well replacements at the site. After achievement of two quarters of sampling, an evaluation report shall be submitted to DEP for review and approval to abandon the wells being replaced. A revised Form 18 and Form 37 Certification shall be submitted to DEP after completion of the work.

The quarterly monitoring program shall include testing of stormwater runoff samples from the major drainage areas. One sample shall be collected from the main swale leading to each of the sedimentation basins and tested for inorganic leachate indicator parameters. These include: Total Alkalinity, Ammonia-Nitrogen, Chemical Oxygen Demand, Chloride, pH, Potassium, Specific Conductivity, Sodium, Sulfate, and Total Organic Carbon. The analytical results should be reported on Form 19 and be submitted to DEP at the same time as the quarterly groundwater results.

The annual monitoring program shall include the collection of surface water samples from the outfalls of each sedimentation basins or, if no discharge is occurring, from the impounded water in basin. Surface water sampling shall be scheduled as necessary to acquire an appropriate sample from each basin's outfall or impounded water. Failure to collect a sample because the basin(s) is (are) dry at the time that annual groundwater sampling is being conducted during the calendar quarter shall be considered a violation of this condition unless the permittee can demonstrate that the basins were dry throughout the entire calendar quarter. In addition to the parameters listed on Form 19, each groundwater and surface water monitoring point shall be sampled for Tritium as part of the annual water quality analyses, as a minimum.

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22. A report on the sampling of the influent leachate for all parameters on Form 19 shall be presented in tabular form and on a graph, and shall be submitted to DEP quarterly and annually with the monitoring well data.
23. The witness zone between the primary and secondary liner must be monitored on a weekly basis to determine the rate of flow, if any. These results must be submitted to the Southeast Regional Office.
24. All mixed loads of residual waste and municipal waste are to be managed as municipal waste in accordance with 25 Pa. Code § 299.201(b).
25. Stripping, removing or re-using of soil that was used as daily cover on a cell is acceptable, so that the permittee may prevent ponding of trapped liquids and promote vertical movement of leachate to the leachate collection system. This acceptance is limited to soil and geosynthetic tarps, which does not include the other ADCM used at the landfill. All other technical and operational requirements for the daily cover shall still apply.
26. a. The Settlement Accommodation Plan (SAP) that was approved by permit amendment on February 24, 2022, is hereby approved for use at the Fairless Landfill. The SAP authorizes landfill disposal operations above final permitted elevations and grades within a limited time, in accordance with the approved SAP. The revised pre-settlement (overfill) grading plan is based on an average of up to 10 percent increase in waste thickness over the approved final waste grades derived from the Final Development Plan, as presented on Drawing SAP-02. The construction sequence of the landfill must match closely to the SAP capping schedule, as shown on Drawing SAP-03, to ensure that the waste placement practice is in compliance with all environmental rules and regulations and to minimize open areas waiting to be capped..
- b. While implementing the SAP, the facility must remain in overall operational compliance regarding landfill gas odors, surface emissions, leachate outbreaks, nuisance controls, etc. If DEP determines that the facility is unable to maintain overall operational compliance, DEP may suspend future implementation of SAP.
- c. GPS installed on landfill operating equipment may be utilized to determine elevations during waste placement; however, a SAP fill elevation must be verified by survey within 30 days of its being attained. The survey data must be verified by a PA-licensed Land Surveyor or a PA-licensed Professional Engineer. Records of the survey information must be maintained.

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- d. The Annual operation report must contain a separate report evaluating the SAP implementation. The SAP report must at a minimum include the following:
- A narrative evaluating the SAP.
 - Calculations, if necessary, concerning proposed SAP settlement verses actual settlement, and validation of assumptions/estimates used in the SAP.
 - Drawings of proposed SAP settlement verses actual settlement on 100-foot cross sections successively each year in addition to the annual topographic survey.
 - Conformance with permitted capping schedule.
 - An analysis of changes in waste stream in the past year that may affect changes in future settlement.
 - Any changes in the bond relative to the status of the SAP.
- e. If revisions to the SAP or capping schedule are necessary, a minor permit modification application must be submitted to and be approved by DEP, prior to further implementation.
- f. If SAP elevations are not within final permitted elevations in each respective area of filling by the end of the projected 5-year time frame (taking into account the thickness required for placement of final cover materials), the excess grade shall be removed within 6 months, unless otherwise addressed by an approved permit modification of the SAP.
- g. Except as expressly authorized by the approved SAP, waste disposal above final permitted elevations shall constitute a violation of this permit and shall be subject to mandatory penalty action, in accordance with 25 Pa. Code § 271.411(c)(1). Waste disposal above approved "overfilled" elevations and grades, or above final permitted elevations beyond the approved settlement accommodation timeframe, as authorized in the approved SAP, shall also constitute a violation of this permit and shall be subject to mandatory penalty action, in accordance with 25 Pa. Code § 271.411(c)(1).
- h. Any final operation, design, or other plan developed as a result of this SAP approval which results in changes in structures, locations, specifications, control measures or other changes of substance, shall not be implemented before first obtaining a permit modification or written approval from DEP.

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27. The construction of the landfill shall follow the construction sequence described in most current Form 14, Table 14-3, which is incorporated into this permit pursuant to Condition No. 1, above.
28. Sediment Basins 1 and 2 and any temporary basins must be constructed and operational prior to the commencement of disposal in their respective phase of the Fairless Landfill construction schedule, which is incorporated into this permit by reference pursuant to Condition No. 1 above.
29. Borrow Pit 20 (BP-20) shall be clean closed during waste disposal operations in cells 7/8 and prior to construction of cells 9/10. See Note No. 7 in Drawing 86086B-10, above.
30. Any substitution of an equivalent material, which is not specifically approved by DEP in the permit application for the landfill construction or closure activities, shall be provided to DEP for approval prior to its use.
31. Progress reports, including work performed, deviations from approved design and future work for construction, filling, and capping activities, shall be submitted to DEP at no less a frequency than bi-weekly (i.e., every two weeks).
32. This permit does not authorize the discharge of air emissions unless the Bureau of Air Quality has approved the discharge of these emissions.
33. Failure to obtain other necessary permits may result in the suspension or revocation of this waste management permit.
34. Brine generated from the Leachate Treatment Plant (LTP) is hereby authorized to be transported by vehicles to approved off-site wastewater treatment plants, as listed in Permit Condition No. 48, or solidification of the Brine such that it may be disposed of as a solid (nonliquid) waste. On-site recirculation of Brine is prohibited. Recirculation of raw leachate is not authorized as part of this permit.
35. Leachate seep occurrences and repairs shall be reported in writing to DEP at no less a frequency than bi-weekly (i.e., every two weeks) and recorded in the facility's daily operational record.
36. Fairless Landfill shall utilize site-specific meteorological data as part of its approved nuisance minimization and control plan. The weather station shall collect time, temperature, wind speed, wind direction, and humidity readings and shall provide this information in real time via publicly available

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internet access as well as via recorded data maintained by the landfill operator. This weather station may be repositioned as needed based on operational conditions but shall provide weather data representative of conditions at the Fairless Landfill. A third-party vendor shall perform instrument audits and calibration for the weather station at six-month intervals. The permittee shall submit the vendor's report to DEP for review. The weather station located at the permittee's offices on New Ford Mill Road and currently used by both the GROWS North and Tullytown Resource Recovery Facility Landfills may be utilized if it can be shown, through the aforementioned audit and calibration requirements, that the weather station is functional, accurate, and representative of conditions at the Fairless Landfill.

37. The utilization of a scale house, laboratory, public convenience center, and radiation staging area (Scale Facility Complex) is authorized to be utilized by the Fairless Landfill subject to the following conditions:
- Pursuant to this permit, the Scale Facility Complex is hereby incorporated in the permit area of the Fairless Landfill and shall be the responsibility and liability of Waste Management of Fairless, LLC to operate and maintain in accordance with this permit and the applicable rules and regulations of DEP. The Scale Facility Complex may be open from 2 a.m. to 8 p.m. and only utilized at those hours by Fairless Landfill. Use of the scale shall at all times comply with all applicable requirements of the Solid Waste Management Act, the Municipal Waste Regulations, and the applicable terms and conditions of the permits of the authorized facilities utilizing the Scale Facility Complex.
 - The use of the Scale Facility Complex shall not modify any other permitted operational activities at Fairless Landfill.
 - The use of the Scale Facility Complex by Fairless Landfill shall be managed to prevent traffic congestion at the intersections or the approach routes leading to the landfill.
 - The special waste laboratory shall serve Fairless Landfill. The operational procedures and waste acceptance/screening plan requirements contained in this permit shall govern the required operations for the facility.
 - The Scale Facility Complex is incorporated by this permit into the Fairless Landfill permit area and Waste Management of Fairless, LLC, as the permittee, shall be responsible for ensuring that the Scale Facility Complex is routinely cleaned and maintained using sweepers and laborers.

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- f. When waste from Fairless Landfill is directed through the Scale Facility Complex, individual site access control shall be managed and electronically verified by a card reader system. All recordkeeping shall be maintained by the facility. The form of the recordkeeping shall not be changed without written approval from DEP.
38. Operation of the Public Convenience Center (PCC) at the Scale Facility Complex is further subject to the following conditions:
- a. The PCC shall consist of a designated area that allows the public to drop-off their household MSW and C&D waste into roll-offs, which will then be hauled to the working face of the appropriate operating landfill, thereby eliminating residential vehicular traffic from the working face with associated safety improvements.
 - b. The use of this PCC by the Fairless Landfill shall not cause traffic congestion at the intersections or the approach routes leading to either facility.
 - c. The use of this PCC by the Fairless Landfill shall not cause nuisance, odor, or dust.
 - d. Roll-off containers that are staged at the PCC shall be watertight so that no leachate leakage occurs and shall be covered when not in use. Roll-off containers that contain waste shall be removed and emptied daily.
 - e. This PCC shall serve the Fairless Landfill. However, the operational procedures and waste acceptance/screening plan requirements contained in the facility's permit shall govern the required waste acceptance/screening criteria for the PCC.
 - f. This PCC facility is located at the shared Scale Facility Complex. The operator of the landfill whose permit area is designated as containing the Scale Facility Complex shall be responsible for ensuring that the PCC is routinely cleaned and maintained using sweepers and laborers as specified the associated operation plan.
 - g. Operation hours for the PCC shall be between the hours of 5 a.m. to 6 p.m., Monday through Saturday, irrespective of the operation hours for the Scale Facility Complex. The PCC shall be closed on Sunday.

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39. Revisions or controls authorized under this permit, or future modifications must also be consistent with the applicable requirements of the Federal Clean Air Act or the Pennsylvania Air Pollution Control Act and any permit(s) issued thereunder.
40. The Nuisance Minimization and Control Plan, incorporated into this permit by reference pursuant to Condition No. 1, above, includes the following operational techniques designed to minimize and control odors and shall be implemented as part of routine operations except as further modified by this permit:
- a. Accelerated installation of gas collection wells and infrastructure, including the use of horizontal gas collection trenches as interim control measures in the platform of the tipping areas.
 - b. Use of a temporary cap to cover open areas, where waste disposal is not expected to occur for some time, in order to minimize leachate generation and odors. When used, the temporary cap shall be placed over intermediate soil cover. Removal of the temporary cap shall be minimized to the greatest extent practicable in order to minimize the exposed area of previously disposed waste.
 - c. Use of odor control and odor neutralization chemicals via direct application to the working face, fixed misting lines, and portable sprayers. Both misting and vapor systems may be utilized, with the vapor systems used during cold weather months when the regular misting systems may freeze. MSDS sheets on the odor control chemicals used shall be provided to DEP when new odor control products are utilized.
 - d. Daily cover soil and geosynthetic tarps, excluding ADCM or a mixture thereof, may be stripped, removed or reused when Permit Condition No. 25 above is met.
 - e. Tonal back-up alarms on landfill equipment shall be replaced with white noise back-up alarms meeting OSHA requirements to mitigate noise nuisances related to landfill operations if needed to address noise complaints.
41. The Quality Assurance and Guidance Document for the Installation of Lining Systems (QAGD) as an attachment to Form 24 for use for quality assurance procedures during the construction of geosynthetic lining systems at the facility is incorporated by reference. The QAGD is a technical reference and DEP may rely on it as a reference in the course of permit application and construction

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certification reviews. DEP reserves the right to question specifics on the site or case-specific quality assurance plans during the course of its review.

42. Inclinometers shall be installed to monitor deformation of the mechanically stabilized earthen (MSE) berm. Prior to Cell 9, the inclinometers have been located in and through the MSE berm at a spacing of no less than one per disposal cell. For Cells 9-13, the inclinometers may be installed through the MSE berms (berm inclinometers) and at the toe of the MSE berms (toe inclinometers), as shown on Figure A-01 (Proposed Inclinator Location Plan, Rev. 2, May 6, 2021). The toe inclinometers are to be installed for geotechnical purposes monitoring subsurface movements during MSE berm construction in Cells 9 through 13 Areas. The berm inclinometer(s) will be installed after the pertinent portion of the MSE berms are constructed. No waste disposal operations in the proximate cell(s) may commence until the inclinometer(s) has(have) been installed, made operational and properly certified.
43. Sediment elevations in the sedimentation basins shall be surveyed on an annual (calendar year) basis and the basins clean out as needed to restore the basins to required design capacity. The results of the annual sediment survey(s) shall be submitted as part of the Annual Operation Report submittal that is due on or before June 30 of each year.

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WASTE ACCEPTANCE AND CLASSIFICATION PLAN

44. a. The approved waste acceptance and classification plan allows Fairless Landfill to accept the following categories of residual waste requiring chemical analysis, residual wastes with chemical analysis waived, and municipal waste requiring special handling:

Residual Waste Requiring Chemical Analysis (Including the Residual Waste Code):

000 - Combustion Residues

- 001 - Coal-Derived Bottom Ash
- 002 - Coal-Derived Fly Ash
- 003 - Flue Gas Desulfurization Residue (FGD)
- 004 - Incinerator Bottom Ash
- 005 - Incinerator Fly Ash
- 006 - Incinerator Mixed Ash
- 007 - Other Ash

100 - Metallurgical Process Residues

- 101 - Foundry Sand
- 102 - Slag
- 103 - Refractory Material
- 104 - Grindings, Shavings
- 105 - Ferrous Baghouse Dust
- 106 - Nonferrous Baghouse Dust
- 107 - Ferrous Scrap, including Auto Recycle
- 108 - Nonferrous Scrap
- 109 - Sandblast Abrasive and Residue
- 110 - Air Emission Control Dust
- 111 - Lubricating Soaps
- 112 - Mill Scales, Heat Treat Scales
- 113 - Dross, Skims

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200 - Sludges, Scales

- 201 - Water Treatment Plant Sludge/Sediment
- 203 - Industrial Wastewater Treatment Sludge/Sediment including Acid Mine Drainage Sludge
- 204 - Metallurgical Sludge
- 205 - Food Processing Sludge
- 206 - Paint, Coating Sludge, and Scale
- 207 - Tank Bottoms
- 208 - Still Bottoms
- 209 - Oily Sludge, Petroleum Derived
- 210 - Air Emission Control Sludge (excluding FGD Sludge and Gypsum)
- 211 - Other Industrial Sludge
- 212 - Lime/Cement Kiln Scale, Residue
- 213 - Lime-Stabilized Spent Pickle Liquor
- 214 - Cooling Tower Sediment/Sludge
- 215 - Flue Gas Desulfurization (FGD) Sludge (including FGD Gypsum)
- 216 - Filter Socks from Erosion and Sedimentation Controls

300 - Chemical Wastes - (Wastewaters Containing Chemicals, Cleaning Agents, Detergents, etc. are reported as 420)

- 301 - Acidic Chemicals (pH <6)
- 302 - Basic Chemicals (pH >8)
- 303 - Combustible Chemicals, Nonhazardous
- 304 - Chemical Salts
- 305 - Spent Activated Carbon
- 306 - Surface Coatings (e.g., Solid, Semi-Solid Paints, Polishes, Adhesives, and Inks)
- 307 - Filter Media/Aids (e.g., Diatomaceous Earth, Ion Exchanging Resins, and Silica Gels)
- 308 - Spent Dyes
- 310 - Detergents, Cleaning Agents
- 311 - Off-Specifications Products, Intermediates
- 312 - Pharmaceutical, Biological (Mfg. and Lab Wastes)

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313 - Wax, Paraffin
314 - Alcohols (Nonhazardous)
315 - Solvents (Nonaqueous, Nonhazardous)
316 - Solvents (Aqueous, Nonhazardous)
317 - Glycols/Antifreeze, Machine Coolants
318 - Photographic Chemicals (Nonhazardous)
320 - Spent Plating Baths (Nonhazardous)
399 - Other Chemical Wastes

400 - Generic Wastes

401 - Leather Wastes
402 - Rubber, Elastomer Wastes
403 - Wood Wastes (Scrap Lumber, Pallets, Particle Board)
404 - Paper, Laminated Paper, Cardboard Wastes
405 - Textile Wastes (Yarn, Fabric, Fiber, Elastic)
406 - Glass Wastes (Cullet)
407 - Polyethylene, Polystyrene, Polyurethane, Other Nonhalogenated Plastics
408 - Glass Reinforced Plastics
409 - PVC, Teflon, CPE, Other Halogenated Plastics
410 - Electronic Component Wastes (Off-Spec Semi-Conductors, Circuit Boards)
411 - Agricultural Wastes (Fertilizers, Pesticides, Feed, Feed Supplements)
412 - Photographic Wastes (Film and Photographic Paper)
413 - Asphalt (Bituminous), Asphalt Shingles
414 - Ceramic Wastes
415 - Linoleum Wastes
416 - Thermal Insulation Waste (Cellulose, Glass, Wool)
417 - Wiring, Conduit, Electrical Insulation
418 - Sawdust, Wood Shavings/Turnings
419 - Empty Containers (Metallic, Nonmetallic Drums, Pails)
424 - Treated Wood, Railroad Ties
430 - Food Waste (Excluding Wastewater Treatment Sludge)
440 - Resins
450 - Polymers (Other Than 407, 409)
460 - Vinyl (Sheet, Upholstery)

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470 - Spent Filters (Air/Gas)
471 - Spent Filters (Aqueous)
472 - Spent Filters (Nonhazardous Fuel, Oil, Solvent)
473 - Paint Filters, Other Cloth/Paper Filters, Supersacs
474 - Grease
480 - Refractory (Furnace, Boiler other than 103)
481 - Carbon/Graphite Residue/Scrap
482 - Baghouse Dust (Other than 105, 106)
483 - Blasting Abrasive/Residue (Other than 109)
484 - Gypsum Plaster Molds, Drywall
499 - Other Generic Waste

500 - Special Handling Residual Wastes

501 - Asbestos-Containing Waste (Friable Asbestos Containing Waste, Insulation, Brake Lining, etc.)
502 - PCB Containing Waste (as defined in 25 Pa. Code § 287.1)
503 - Oil-Contaminated Waste (Absorbents, Rags)
504 - Paints (Liquid)
505 - Spent Catalysts
506 - Contaminated Soil/Debris/Spill Residue and Near-Surface Horizontal Directional Drill (HDD) Cuttings (Nonpetroleum) (Dredge Material, Water Intake Debris and Sediment, Coal Mill Rejects)
507 - Waste Petroleum Material Contaminated Soil/Debris
508 - Virgin Petroleum Fuel-Contaminated Soil and Debris
509 - Waste Oil that is not Hazardous Waste Oil (automotive, machining, cutting, etc.)
510 - Waste Tires

700 - Industrial Equipment, Maintenance Waste/Scrap

701 - Pumping, Piping, Vessels, Instruments, Storage Tanks
702 - Scrap from Maintenance and Product Turnaround
703 - Batteries (Nonhazardous)
704 - Grinding Wheels, Sanding Disks, Polishing Belts, Welding Rods, Broken Tools
710 - Plant Trash

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799 - Other Maintenance Waste

800 - Noncoal Mining, Oil and Gas, and Other Well Drilling Wastes

801 - Nonoil and Gas Well Drilling Waste - includes residuals, and drill cuttings from monitoring well and drinking water well construction. For this facility, does not include drilling fluids.

900 - Miscellaneous

901 - Auto Shredder Fluff

902 - Nonhazardous Residue from Treatment of Hazardous Waste (Other than 203)

999 - Other

Residual Wastes with Chemical Analysis Waived

The categories of residual wastes that qualify for the waiving of chemical analysis by DEP are limited to those listed below.

499 Animal Droppings (Manure)
413 Cured Asphalt (Solidified)
405 Carpet or Fabric Scrap Waste
414 Ceramic Insulation Waste
499 Cured Resin Waste
402 Cured Rubber, Elastomer waste
499 Dead Animals (Nonexperimental)
419 Empty Container Waste (RCRA Empty)
499 Empty (Dried) Commercial Paint Can Waste
499 Fencing (Chain-Link and Barbed)
407 Foam Type Wastes (Rigid Plastic Foam, Expanded Polystyrene Foam, and Polyurethane)
430 Food Waste (Excluding Treatment Sludges)
470 Fresh Air Intake Filters waste
499 Gaskets - Unused (Rubber and Cork)
408 Glass Reinforced Plastics (Fiberglass)

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- 406 Glass Waste (excluding Specialty Glass and Glass Sludges)
- 409 Halogenated Plastics (PVC, CPE, and Teflon)
- 406 Incandescent Light Tubes/Bulbs
- 499 Labels/Packaging Waste
- 401 Leather Scraps
- 415 Linoleum Waste
- 499 Metal Scrap (Excluding Powdered Grindings or if Contaminated with Fluids or Oils)
- 407 Nonhalogenated Plastics
- 403 Nontreated Wood Waste
- 405 Nylon Materials
- 472 Oil Filters, Used (Hot Drained and Nonterne Plated)
- 499 Packing/Shipping Material
- 404 Paper and Cardboard Waste
- 499 Personal Protective Equipment Waste
- 499 Screen Waste
- 499 Shingle Scrap
- 416 Thermal Insulation Waste (Cellulose, Glass, and Wool)
- 417 Wire and Wire Scrap (Conduit and Electrical Insulation)
- 403 Wood Wastes (Excluding Treated Wood)

Municipal Waste Requiring Special Handling:

- Municipal Sewage Sludge
- Processed Infectious Waste
- Chemotherapeutic Waste (after being processed by incineration)
- Nonhazardous Ash Residue from Municipal Waste Incineration

- b. The maximum total concentrations for non-TCLP organics in residual waste, municipal waste, and municipal waste requiring special handling are not to exceed the following limits: 2,500 ppm for aromatic halogenated hydrocarbons; 5,000 ppm for aliphatic halogenated hydrocarbons; 10,000 ppm for aromatic hydrocarbons; and 50,000 ppm for volatile and semi-volatile organics.

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- c. For acceptance of virgin petroleum contaminated soil and debris, Form U is to be substituted for Form FC-1 if the TPH concentration exceeds one percent. See also Permit Condition 44.v below for acceptance procedures for TPH concentrations less than one percent (10,000 ppm).
- d. The permittee shall not accept any residual waste or municipal waste requiring special handling whose chemical constituents are not included or are in excess of the maximum acceptance concentrations as delineated in the waste analysis and classification plan, unless a major permit modification is submitted and approved by DEP. Any new waste request not approved in this plan must be submitted as a major permit modification.
- e. The permittee shall not accept, receive, dump, discharge, process, or dispose hazardous waste as defined in 25 Pa. Code Chapter 261a or 40 CFR Part 261.
- f. All residual and municipal waste requiring special handling from new generators must be consistent with the requirements stated in the waste analysis and classification plan incorporated by reference pursuant to Condition 1.
- g. The permittee must submit a waste disposal request and source reduction strategy from each individual large quantity residual waste generator. The permittee must submit a waste disposal request from each individual generator of municipal waste requiring special handling. Proof of submission to DEP would be dated certified mail return receipt cards, signed, dated, acceptance receipts for hand-delivered requests, signed, dated receipt from overnight mail/federal express deliveries, or some other means, such as electronic submission, acceptable to DEP. Except for disposal requests including residual waste code 999 (Other), the wastes indicated on Forms U, 35, 36, or 43 may be accepted for disposal by the permittee 15 days after proof of submittal to DEP, unless otherwise notified by DEP in writing. Wastes identified as 999 (Other), may not be accepted until specific written approval is received from DEP. If, at any time, it is determined by DEP that the waste included in the disposal request is not consistent with the waste analysis and classification plan or the design of the landfill or waste reduction strategy, the permittee shall be notified and acceptance of this waste may be prohibited until deficiencies have been corrected. The permittee may be subject to any and all applicable enforcement action to the Solid Waste Management Act and the Rules and Regulations promulgated thereunder, if waste is accepted not consistent with the waste analysis and classification plan. This Subcondition is not applicable to those Residual Wastes with Chemical Analysis Waived as listed in Condition 44.a, above.

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- h. All submissions covered by Permit Condition 44.g must be sent to the host municipality and the host county at the same time they are submitted to DEP, unless the host municipality/county specifically notifies both the permittee and DEP in writing that they do not wish to receive the submissions and affirmatively waives their right to receive the submissions. An alternative submittal or notification process for the individual disposal request submittal process that is acceptable to the host municipality/county may be substituted, upon written notification to DEP, in the event the municipality/county does not wish to completely waive their rights under this Subcondition.
- i. The permittee shall submit, to DEP's Southeast Regional Office, an amended appendix to the permit that lists all residual waste and municipal waste requiring special handling accepted for disposal at the facility. This amended appendix shall be submitted for the calendar quarter by April 20, July 20, October 20, and January 20 for the January – March, April – June, July – September, and October – December quarters, respectively. This amended appendix shall include the information by generator, including the waste type, approved quantity, quantity accepted, generator identification number, and the identification number for each Form U, Form 35, Form 36, and Form 43 for all waste accepted at the landfill during the calendar quarter covered by the report. The appendix must include the anniversary acceptance date for each generator of residual waste and municipal waste requiring special handling.
- j. Form 26R, the annual analysis report and annual analysis data from generators of municipal waste requiring special handling (Forms 35, 36, and 43) is to be kept on file for each waste generator at the landfill site. This is due at Fairless Landfill from the generator one year after DEP receives Forms U, 35, 36, or 43 submissions. For small quantity residual waste generators, analysis data and/or certification pertaining to hazardous waste determination criteria is to be kept on file. The waste cannot continue being accepted if the landfill does not have an annual submission of Form 26R or annual analytical data from generators of municipal waste requiring special handling on file.
- k. Any new large quantity generator of Residual Wastes with Chemical Analysis Waived, as listed in Condition 44.a, above, that proposes to use the landfill must submit Forms U and 25R to the landfill.

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- l. The landfill must keep certification documents from all small quantity generators on file indicating that their waste streams are not hazardous.
- m. The landfill's annual report, submitted by June 30 of each year, must include documentation that the analysis or certification required under Section 273.313 for chemical analysis of waste for each waste stream from each individual generator utilizing the landfill for disposal is on file.
- n. All Forms U, 35, 36, 43, and FC-1 documents must be kept on file and each assigned a sequential identification number which is to be recorded on all forms submitted to DEP.
- o. Hazardous waste, as defined under 25 Pa. Code § 261a, may not be accepted at the facility for disposal. Any residual waste generator whose analysis reaches 85 percent of the hazardous waste limit shall provide additional analysis and documentation to justify that the waste is below the hazardous waste limit.
- p. No residual waste is to be accepted from any facility bulking/mixing different categories of residual (Form U) waste, unless such facility is permitted by DEP for this purpose.
- q. Form U's from individual generators of friable asbestos containing waste do not have to be submitted.
- r. New sources of incinerator residue from resource recovery incinerators shall be tested in accordance with the following procedure. The analysis data shall be submitted to the Southeast Regional Office. Analyses data generated by resource recovery incineration permit requirements can be submitted to comply with the following conditions:
 - i. A grab sample of resource recovery incinerator residue is to be taken from each incoming load of ash residue to be tested for pH. All of this sampling data shall be submitted with the data from the composite sampling below.
 - ii. For a minimum of the first eight weeks of incinerator operation, testing shall be done on a weekly composite sample comprised of at a minimum daily grab sample. Each grab sample shall be tested for pH. The weekly composite sample shall be tested for pH, lead, chromium, and cadmium. Also, for the initial sampling period, an analysis for all Form 41 parameters shall be run on each fourth week composite sample. All data from

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this sampling period shall be submitted to DEP at the conclusion of the eight-week period.

- iii. Upon receiving written approval from DEP, testing shall be done on a monthly basis for all Form 41 parameters and reserve alkalinity for a minimum of six months. The monthly composite sample is comprised of a minimum of one random grab sample from each day of operation. All grab samples shall be of an equal amount. Data from this sampling period is to be submitted to DEP on a monthly basis.
- iv. Upon receiving written approval from DEP, testing shall be done on a quarterly basis for all Form 41 parameters and reserve alkalinity. The quarterly composite sample is comprised of weekly random grab samples. All grab samples shall be of an equal amount. Data from this sampling is to be submitted to DEP on a quarterly basis.
- s. Infectious and chemotherapeutic incinerator ash must contain less than five percent volatile solids. Incinerator ash from other sources has no volatile solids limit.
- t. Wastes for quantity increase requests for previously approved waste streams from specific generators may be accepted for disposal immediately. Each request must include the most recent generator's annual report and analytical data for submissions more than 12 months old.
- u. RCRA empty containers can be accepted as Residual Wastes with Chemical Analysis Waived.
- v. i. All solid wastes excluded under 25 Pa. Code § 261a.4(b) and 40 CFR 261.4(b) may be accepted for disposal except for waste categories listed under 25 Pa. Code §§ 261.4(a)(4), (6), (8), (10), (18), and (20). The unacceptable waste includes:
 - (I) Source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1954.
 - (II) Household hazardous waste collected by a collection contractor under Section 1512 of Act 101.
 - (III) Coal refuse as defined in the Coal Refuse Disposal Control Act.

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- (IV) Treatment sludges from coal mine drainage treatment facilities.
- (V) Pulping liquors (black liquor) that are reclaimed in a pulping liquor furnace and then re-used in the pulping process.
- (VI) Spent sulfuric acid used to produce virgin sulfuric acid.
- ii. Corrosivity and Ignitability, as defined in 40 CFR 261.21 and 261.22, will replace pH and flashpoint, respectively, as acceptance criteria for disposal.
- iii. If a specific waste stream has been found to be consistent based on 25 standard fingerprint analyses, then the frequency can be reduced to one standard fingerprint analysis per day for each specific waste stream from a specific generator.
- iv. Sampling frequencies for oil contaminated waste, contaminated soils, site cleanup waste, oil washing material, thermally treated soil, and bioremediated soil must satisfy the requirements of SW-846 (or equivalent). If the sampling frequency does not meet the requirements of SW-846 (or equivalent), then the sampling frequency must be at least one sample per 500 cubic yards.
- v. A Form FC-1 is to be submitted for virgin petroleum contaminated soil and debris containing less than one percent total petroleum hydrocarbons (10,000 ppm). A Form U is to be submitted for virgin petroleum contaminated soil and debris containing greater than one percent total petroleum hydrocarbons. For virgin petroleum contaminated soil and debris of containing less than one percent total petroleum hydrocarbons, the facility is permitted to accept the waste without written approval from DEP pursuant to, and consistent with, the provisions of Appendix V of the Waste Acceptance Plan.
- w. Prior to commencement of disposal operations at Fairless, the permittee shall certify, by providing a list in writing, as to which previously approved residual wastes and municipal wastes requiring special handling from current generators approved for waste acceptance at GROWS North and/or TRRF Landfills are consistent with the Form R Waste Acceptance and Classification Plan approved herein for Fairless. Waste streams from generators so certified may then be transitioned to, and accepted at, Fairless when disposal operations commence. After the

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commencement of disposal operations at Fairless, any new or modified disposal requests must be submitted to Fairless pursuant to Condition 44, herein.

- x. The facility may construct a Drop and Swap Area to temporarily stage or store waste trucks and/or trailers (hereinafter "trailers") in order to improve disposal efficiency by supplementing the flow of waste into the landfill with the stored trailers during off-peak hours when inbound truck traffic is reduced.
- i. The Drop and Swap Area shall be constructed with, from top to bottom, 8 inches of compacted millings, sand and gravel (or other pre-approved and suitable material) above a layer of geotextile fabric and a layer of compacted subgrade.
 - ii. Upon acceptance of the construction certification by DEP, the permittee may temporarily stage or store trailers containing municipal waste within the designated Drop and Swap Area and, within the same working day, unload their contents at the working face throughout the day during off-peak hours. No trailers containing municipal waste will be stored overnight. All trailers stored at the Drop and Swap Area will be emptied before the landfill closes for the day.
 - iii. After having their contents unloaded at the working face, empty trailers may be returned to the Drop and Swap Area to be picked up later or directly transported offsite.
 - iv. Trailers containing municipal waste that arrive at the landfill before the start of waste acceptance hours may park in the designated Drop and Swap Area, but will remain connected to the tractor until the landfill opens and trucks can be weighed in.
 - v. All waste trucks shall be weighed in and out at the Scale Facility Complex during its approved operational hours and waste quantities shall be included in the daily volumes in accordance with all applicable requirements of the Solid Waste Management Act, the Municipal Waste Regulations, and the applicable terms and conditions of the facility's permit(s).
 - vi. All trailers containing municipal waste must be tarped and sealed.

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vii. The Drop and Swap Area operations and surrounding areas will be routinely inspected to confirm the integrity of the trailers and check for impacted soils and litter. Any problems will be addressed immediately, and litter will be removed immediately in accordance with the approved site litter control plan.

viii. The permittee must comply with all applicable regulations regarding the storage of municipal waste, as described in 25 Pa. Code Chapter 285. No conditions which are harmful to the public health, public safety or the environment, or which create safety hazards, odors, dust, unsightliness or other public nuisances are allowed. The Permittee must ensure that the storage and transportation of trailers in the Drop and Swap Area will not impact any surface water or groundwater sources.

45. All approved sources of residual waste and municipal waste requiring special handling are to be analyzed on an annual basis for parameters included in the approved Form U, Module 1, Form 35, Form 36, or Form 43 submissions.

LEACHATE MANAGEMENT

46. Two leachate storage tanks, each 1.42 million gallons (101' dia. and 25' high), shall be utilized for on-site storage of leachate. The first tank shall be constructed and available for use prior to the commencement of acceptance of waste for disposal, and the second tank shall be constructed and available for use prior to commencement of waste disposal operations in Cell 7 or 8, whichever cell is constructed first. Leachate shall be discharged directly to the Leachate Treatment Plant (LTP) for treatment and discharge in accordance with Condition 48 of this permit.

To provide additional storage required for leachate generated from the Eastern Expansion area, two (2) additional leachate storage tanks, i.e., T-11 and T-12, each of 1,420,000 gallons, will be constructed at a location adjacent to the LTP, which is within the existing Fairless Landfill permit boundary. The tanks are designed with an aeration system to minimize odors, as well as a bermed secondary containment impoundment in accordance with Condition 47 below. Impoundment plan and details for these leachate storage tanks are presented on Drawings A-24 through A-26.

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47. a. Secondary containment, consistent with the requirements of 25 Pa. Code § 285.122, shall be provided for each tank and/or tank farm.
- b. All stormwater collected within the secondary containment area(s), shall be inspected. If there is evidence of leachate present within the containment area(s), stormwater shall be conveyed to the Leachate Treatment Plant before it is discharged to the environment. If there is no evidence of leachate present in the secondary containment area(s), the stormwater may be directed to an adjacent stormwater management channel in accordance with, and subject to, any procedures, practices or requirements as may be specified by DEP's Clean Water Program. Standard erosion and sedimentation control measures shall be implemented to control run-off from the disturbed area during and after the construction of leachate storage facilities.
- c. Vehicular transportation of leachate or Brine for off-site treatment and disposal is an approved basic treatment method for Fairless Landfill, as authorized pursuant to Act 45 of October 7, 2015, to augment onsite treatment at the LTP and piped leachate discharge to offsite Publicly Owned Treatment Works (POTWs). The permittee shall notify DEP in writing of its intent and basis for implementing vehicular transportation of leachate or Brine. The notice shall include the commencement date of the transportation, the specific circumstances requiring the vehicular transportation, and the anticipated duration. Written notifications shall be provided by the permittee within seven (7) days of the commencement of the vehicular transportation of leachate or Brine. Written updates shall be provided weekly during the duration of vehicular transportation and upon cessation of vehicular transportation. These written updates shall include the total amount of leachate or Brine transported during the previous week and the available storage capacity in gallons and percent of available storage.
48. a. Leachate generated by the Fairless Landfill shall be collected and handled (1) by direct discharge to the LTP, which is part of the Fairless Landfill permit area, for processing prior to discharge via NPDES permit to the Delaware River; (2) by piped discharge to an approved off-site POTW. Additionally, leachate or Brine generated by the Fairless Landfill may be collected and handled by vehicular transportation to the following approved POTWs: Delaware County Regional Water Control Authority (DELCORA) in Chester, PA and Altoona Water Authority (by Titus Environmental Limited of Midland, PA) in Altoona, PA. Leachate and Brine management by vehicular transportation shall be implemented in accordance with the Leachate Management – Phase II (Form 25). All operating and reporting requirements for leachate, Brine and other treatment residues shall be recorded on the facility's operational records. Additional or

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replacement POTWs shall not be utilized until DEP is notified, in writing, of the name and reason for the added or replacement POTW and provided with the receiving POTW's approval to accept the leachate, except that a permit modification may be required should the reason for the added or replacement POTW trigger the need for contracts pursuant to 25 Pa. Code § 273.273(b)(4) or the notification requirements pursuant to 25 Pa. Code § 273.277.

- b. The generic concept of piped discharge to an off-site POTW is incorporated into the Fairless leachate management plan. However, the only actual POTW discharge alternative approved at this time is discharge to the Morrisville Pollution Control Facility (Morrisville Plant), owned and operated by the Municipal Authority of the Borough of Morrisville (Authority). This discharge alternative is further subject to any restrictions or limitations that may be placed upon the alternative by DEP or the Delaware River Basin Commission. Any other off-site POTW direct discharge alternative(s) will require further modification of the Fairless Landfill's leachate management plan prior to implementation. The type(s) of further modification(s) is(are) to be governed by the specifics of each individual request. However, a request to discharge directly to a POTW other than the Authority's shall not be construed, in and of itself, as requiring a major modification to the Fairless Landfill leachate management plan because of the concept approval contained herein unless the specifics of the request would otherwise require the submission of a major modification application.
- c. Title 25 Pa. Code § 273.275(b) requires an on-site leachate storage system to have sufficient capacity at least equal to the maximum expected production of leachate for any 30-day period for the life of the facility as estimated pursuant to 25 Pa. Code § 273.162. Fairless Landfill may not rely on storage capacity available at GROWS Landfill, GROWS North Landfill, or Tullytown Resource Recovery Facility Landfill for the purpose of complying with 25 Pa. Code § 273.275(b), as noted above.

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GAS MANAGEMENT

49. The Permittee shall install and operate its Gas Management Plan for the facility as an active gas management system in accordance with the plans and designs contained in the major permit modification application incorporated on May 23, 2024, as noted in Permit Condition No. 1 above. Additional gas wells for collection or monitoring purposes may be installed, if warranted by site and/or well conditions, followed by DEP's approval via the submission of construction certification, including as-built drawings.
- A) WMF will submit the Form 37 Construction Certification that details the modifications made to the LFG collection and control system to divert the gas to the RNG facility once construction of the equipment covered by the permit is complete. Upon approval by DEP, LFG from Fairless Landfill may be sent to the RNG Plant. The Permittee shall operate and maintain the RNG Plant to treat, as designed, the LFG from the surrounding landfills.
- i. The new RNG Plant, upon successful construction and installation of all equipment, will undergo startup, shakedown, and testing in accordance with Air Quality Plan Approval No. 09-0210B, General Permit WMGM055SE001, and any additional Solid Waste Permits and authorizations. The Solid Waste Management program will be copied on the notification to the Air Quality program for the start-up of the RNG Plant prior to its full, automated operations.
- ii. Prior to the operation of RNG Plant, the Permittee may continue to operate and maintain the ULE Flare System as approved by DEP on February 7, 2020, and corrected on March 5, 2020. The Permittee shall continue to submit RNG development progress reports to DEP until the earlier of (1) March 30, 2026, or (2) completion and written DEP approval of the RNG Plant.
- iii. The Permittee shall implement the applicable provisions in the most recent version of the PPC Plan for emergencies and incidents related to on- or off-site operations of the new gas collection and control system for the Fairless Landfill.

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- iv. Recordkeeping and reporting requirements in the Solid Waste Permit, Air Quality Plan Approval, Operating Permit, and all approved revisions and modifications must be adhered to.
- B) After the RNG Plant is authorized by DEP to operate, the Permittee may continue to operate and maintain the ULE Flare System, that was approved by DEP on April 7, 2020, to treat or control LFG transmitted from the Fairless Landfill. The following sub-conditions as presented in the February 7, 2020 (as corrected on March 5, 2020), major modification of permit may still applicable:
 - i. The existing ULE Flare System may not be used for the control of LFG from Fairless Landfill unless the facility maintains all proper Air Quality authorizations and approvals for such usage.
 - ii. Upon successful accepted decommissioning of LFG enclosed flare system Unit C-06, the existing enclosed flare system Unit C-05 (located at the LFG management compound within the permit boundary of GROWS Landfill) will remain to treat and control LFG.
 - iii. Construction, installation, operation, maintenance, and monitoring of the gas management system, including, but not limited to, the LFG collection and conveyance pipeline, and primary and secondary controls are hereby approved to be implemented in accordance with permit modification Authorization No. 1445312, issued May 23, 2024.
 - iv. The Permittee shall implement the applicable provisions in the most recent version of the PPC Plan for emergencies and incidents related to on- or off-site operations of the new gas collection and control system for the Fairless Landfill.
 - v. Recordkeeping and reporting requirements in the Solid Waste Permit, Air Quality Plan Approval, Operating Permit, and all approved revisions and modifications must be adhered to. All testing and monitoring reports, analyses, notices, and similar documents that are required by the Air Quality Plan Approval shall be maintained at the facility and be available upon request.

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EQUIVALENCIES (Form Q)

50. a. Alternate Subbase material. A proposed alternative to the 6-inch thick low permeability soil subbase layer is a Geosynthetic Clay Liner (GCL) consisting of bentonite encapsulated between two layers of nonwoven geotextile. GCL will be installed on the prepared subgrade of which the upper one foot will have maximum particle size of one inch.
- b. Leachate Detection Zone. A geocomposite drainage layer (HDPE geonet core with a needle punch nonwoven geotextile heat bonded to both sides) in lieu of the 12-inch granular layer.
- c. i. Final Cover Grading. A design configuration of at least a 16 foot-wide terrace (bench) for every 40 feet maximum rise in elevation on the slope is proposed instead of a terrace at least 15 feet wide on slope of every 25 feet maximum rise in elevation. The benches will be graded at minimum of inward slope 12.5%.
- ii. Final cover system configuration 1. A 10 oz/sy nonwoven geotextile, 40 mil textured on both sides geomembrane, and geocomposite drainage layer as shown in drawing 86086B-35, detail 1.
- iii. Final cover system configuration 2. A combination of geomembrane/drainage layer and 10 oz/sy nonwoven geotextile as shown in drawing 86086B-35, detail 1A.
- d. Alternate Daily Cover Material (ADCM) as described in Condition 51, below.
- e. The facility is permitted to use two specific aggregate gradation materials for the protective cover as provided in Table J-2(2). The protective cover material shall have a maximum particle size of 1.5 inches, shall be classified as GW, GP, or SP as defined by USCS and shall be used as follows:
- i. Coarse aggregate No.1 (modified AASHTO No. 8) may be used with geocomposite.
- ii. Coarse aggregate No. 2 (modified AASTHO No. 57) shall be used with a geocomposite as per Note 1 of Details 1A and 2A of Drawing 86086B-22.

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Additionally, Protective Cover shall meet the minimum permeability of 0.20 cm/sec. If less than 0.20 cm/sec, then leachate collection laterals shall be installed as shown in Drawing 86086B-08.

- f. The facility is permitted for the use of glass cullet material as gas extraction well backfill, gas system header backfill, leachate force main backfill, use in construction of landfill access road subgrades, the use as a general fill material, and utilization of glass cullet beneath the final cap in areas of settlement and in the cap drainage layer subject to the following sub-conditions:
- i. Temporary landfill access road subgrades and subbases will utilize no more than a forty percent (40%) glass cullet/mixture.
 - ii. Final landfill access roads depicted on final development plans, including subgrades and subbases, will utilize no more than a ten percent (10%) glass cullet/soil mixture.
 - iii. For road construction utilizing glass cullet and soil, the ratio of cullet to soil will be done by the use of individual loads during road construction. For a 40% mixture, three loads of soil must be mixed with two loads of glass cullet utilizing a bulldozer to incorporate the two materials. For a 10% mixture, nine loads of soil will be mixed with one load of glass cullet utilizing a bulldozer to incorporate the two materials.
 - iv. For use of glass cullet in the landfill cap drainage layer, engineering test must be performed to determine suitability including the permeability and grain size as required by the cap design criteria. As built, documentation must be submitted with Form 37 pertaining to the use of glass cullet in the landfill cap drainage area.
- g. The facility is permitted for the option to use Reclaimed Asphalt Pavement (RAP) in the construction of the landfill perimeter berms. The use of RAP as a structural fill material is restricted to the construction of the landfill perimeter berms only. Its use is prohibited in the subgrade of the cell floor areas. Furthermore, the use of RAP in construction of the perimeter berms is limited by soil mixture ratios established in the Application for Major Permit Modification received by DEP on April 13, 2022, subject to the following conditions:

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- i. Using up to 25% RAP and not less than 75% soil mix in the reinforced fill zones for the construction of the perimeter berms.
- ii. Using up to 50% RAP and not less than 50% soil mix in the non-reinforced fill zones for the construction of the perimeter berms.
- iii. At least 8 feet must be maintained between all RAP mix material used in the construction of the landfill perimeter berms and the seasonal high groundwater level.
- iv. Construction activities shall be in accordance with the approved Construction Quality Assurance Program and Testing Protocol for Nonsynthetic Material in the Form J of Phase II Application, as revised.

ALTERNATE DAILY COVER MATERIAL (ADCM)

51. The following materials are approved for use as alternate daily cover material (ADCM) at Fairless Landfill. The following ADCM have been previously subjected to Equivalency Review and subsequently approved by DEP for statewide use after incorporation by DEP into the facility's solid waste permit.

- Municipal Incinerator ash
- Fly ash conditioned with cement kiln dust
- Recycled paper deinking sludge
- USDA clay loam soil texture classification
- Coal ash, as subject to waste placement within 24 hours
- Sanifoam
- RUSMAR AC-645 Long Duration Foam

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- No. 3ML-9791 Foam
- Processed construction and demolition waste
- Propat (patented processed auto shred material produced by Polarized Schiabo Neu Company)
- Posi-shell
- Nonpetroleum contaminated soil
- Fairo-Cover (shredded auto fluff produced by Fairless Iron and Metal, LLC)
- Geosynthetic tarps
- Automobile shredder residue (ASR)

The following Subconditions 51.a. through 51.f apply to all approved ADCM at the facility, while Subcondition 51.g. applies to ASR additionally:

- a. All stormwater runoff from ADCM applied at the working face or from ADMC stockpiles must be managed as leachate, unless otherwise approved in writing by DEP. Stormwater runoff from uncontaminated soil from nonspecific borrows area and clay loam soils applied as daily cover will not have to be managed as leachate.
- b. No ADCM is to be utilized on a side slope, unless runoff from the ADCM is directed into the leachate collection system. Uncontaminated soils from nonspecific off-site borrow areas and clay loam soils can be placed on side slopes without directing runoff into the leachate collection system.
- c. DEP is to be notified one week prior to making any changes in types of ADCM utilized at the site.

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- d. All processed or unprocessed materials consisting of solid waste(s) utilized as ADCM under approvals granted in this permit or subsequent modifications, are wastes and not recyclable materials, and count towards the ADV of the facility. The wastes are subject to the host municipality benefit fee(s) of Act 101.
- e. All categories of ADCM approved under this permit are to be only utilized as daily cover, unless otherwise indicated.
- f. ADCM, whether used in place of or in addition to soil or geosynthetic tarps, are not to be stripped or removed from the previous day's working face or cell prior to starting operations the following day, nor may ADCM be reused.
- g. ASR is a residual waste (Residual Waste Code 901) for which the permittee must meet the following requirements:
 - (i) All ASR received must be approved in writing prior to being accepted at Fairless Landfill. The permittee will request approval via the Form U process. The Form U will include a full characterization in accordance with the permittee's Application Requirements for Alternate Daily Cover Material, as presented in Appendix C of Form Q in Permit Condition No. 1, above.
 - (ii) For any ASR received at Fairless Landfill that is approved for use as ADCM at another landfill facility in Pennsylvania, the Form U submission must also include quarterly testing results for at least the four quarters immediately prior to the submission that include the periodic testing parameters listed in sub condition (iv) below. In addition, this type of ASR shall be tested quarterly following the requirements in Sub condition g.(iv).
 - ~~(iii) For ASR not covered by sub condition g.(ii), the permittee shall perform the analysis described in sub condition g.(iv), following the procedures specified in the Form U, at the frequencies of monthly for the initial 6 months of acceptance at Fairless Landfill and quarterly thereafter.~~
 - (iv) Periodic testing described in this condition shall include, at a minimum, the following parameters:

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Metal Tests:

TCLP Metals – (RCRA-8)
TCLP Copper
TCLP Nickel
TCLP Zinc
Total Lead

Organic Tests:

Total PCBs
Total Oil and Grease

- (v) Results of the all testing in this condition must demonstrate that the ASR meets the characteristics of residual waste and is expected to perform as a daily cover material pursuant to 25 Pa. Code § 273.232(b).

The above referenced ADCM have received separate approvals for use as ADCM, and are included on the statewide-approved equivalency list. Based upon DEP's Policy and Procedure for Municipal Waste Facility Equivalency Approvals, the permittee is authorized to utilize these materials, subject to the terms and conditions of their individual approvals, at the Fairless Landfill. Failure of any of these materials to perform satisfactorily at the Fairless Landfill, or failure of the permittee to comply with the terms and conditions upon which the original reviewing region based its approval, shall be grounds for revocation of the approval herein granted. The details of each ADCM are provided in Attachment-I, below.

NONSITE SPECIFIC OFF-SITE SOURCES SOIL AND AGGREGATE MATERIAL

52. The facility is permitted to utilize nonsite specific off-site sources of soil for construction material and cover material subject to the following Subconditions:
- a. For the use of dredged material, chemical analysis data of the dredged material must be submitted to DEP for approval in accordance with sampling protocol outlined below for each dredge disposal area, or replenished dredge disposal area, at least thirty (30) days prior to excavation:

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i. **Dredge Sampling Protocol:**

Procedures:

- The dredge deposits will be subdivided into 50,000 cubic yard sections.
- For all inorganic parameters: One composite sample will be collected from each 50,000 cubic yard section. Each composite sample will be taken from five locations within each 50,000 cubic yard section.
- For Volatile Organic Compounds (VOCs): Each of the 50,000 cubic yard sections (identified above) will be screened with a Photoionization Detector (PID). The material will be extracted from ground surface to the total depth of dredge pile using a hand auger or other method acceptable to DEP. Once extracted, the materials will be scanned with a PID at one-foot intervals. Field screening will be performed at a location shielded from the wind, and away from gas tanks, or gas-powered equipment. One sample discrete location will be selected and a sample will be collected from each 50,000 cubic yard section. The sample interval with the highest PID reading will be collected for analysis. If the materials are all nondetect (i.e., do not exceed background PID readings), a minimum of one sample for the 50,000 cubic yard section will be collected.

Laboratory Analysis:

Samples that are collected according to the above sampling procedure shall be analyzed for the following parameters:

- Volatile Organics (EPA Method 8260B)
- Total Metals and TCLP: AG, AS, Ba, Cd, Cr, Cu, Hg, Ni, Pb, Sb, Se, and Zn
- Pesticides (EPA Method 8081A/8082), plus Lindane and Methoxychlor
- Total Petroleum Hydrocarbons (TPH)

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- Cyanide
 - Sulfide
 - pH
 - Total PCBs (Method 608 GC/ECD), PCBs, 209 congeners (Method 1668A GC/ECD)
 - Radioactivity: Radium 226 (EPA 903.1), Gross Alpha (EPA 900.0), Gross Beta (EPA 900.0), Radium 228 (EPA RA-05), Radium Total (EPA RA-05)
- ii. For the use of dredged material, Physical Test Data of the dredged material consisting of one composite sample in accordance with the sampling protocol outlined in the EPA SW846 Manual for every 10,000 yards of dredge material demonstrating that the dredged material will satisfy the performance standards of DEP, thirty (30) days prior to excavation of any dredge disposal site or replenished dredge disposal site.
- iii. Unless dewatered pursuant to Chapter 287.7 or otherwise determined by DEP not to be a waste (based upon the data provided pursuant to Subconditions 52.a.i and 52.a.ii, above), dredged material is regulated as residual waste, is not a recyclable material, and counts towards the daily volume of the facility. These wastes are subject to the host municipality benefit fee(s) of Act 101.

Unless determined by DEP not to be a waste, use of dredged material pursuant to this Condition No. 52 is limited to alternative daily or intermediate cover uses, or structural fill uses located within lined areas of the landfill, subject to the acceptability of the physical and chemical analyses required in Subconditions 52.a.i and 52.a.ii, above. If determined not to be a waste, use of dredge material shall be consistent with the dewatering determination.

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- b. Uncontaminated soil material other than dredge material from nonsite-specific off-site sources (soil material that meets clean fill requirements) shall have no use restriction at the landfill other than the requirements listed below, provided that the material is not placed in or on waters of the Commonwealth:
- i. Uncontaminated soil may be used as a source of daily, intermediate, and final cover soils as well as structural fill and subgrade fill based on the chemical and physical suitability of the soils for each designated purpose.
 - ii. Uncontaminated soil is further subject to the approved Quality Assurance Program and Testing Protocol for Nonsynthetic Material of Form J. Use of uncontaminated soil from nonsite specific off-site sources pursuant to this condition shall be adequately described in accordance with Chapter 273.117(a)(2) and (b).
 - iii. Determinations that soil from nonsite specific off-site sources is suitable for use at the landfill pursuant to this Subcondition 52(b) shall also be consistent with DEP's Management of Fill Policy and shall be kept on file by the permittee for the duration of the facility's bond. These records shall be made available to DEP upon request.
- c. Contaminated soil from nonsite-specific off-site sources shall be utilized pursuant to this Subcondition:
- i. Soil material that does not meet clean fill requirements shall be considered a waste instead of a recyclable material, and shall be used only as daily or intermediate cover pursuant to Attachment – I, below, except as otherwise allowed pursuant to Subcondition 52.c.ii below. Material subject to this Subcondition 52.c.i shall be subject to applicable fees and shall be counted against the facility's daily volume.
 - ii. If the soil material does not meet the clean fill requirements but does meet the regulated fill requirements, then it may be used as structural or subgrade fill at the landfill provided that said soil is chemically and physically suitable for each designated purpose and provided that said use is further authorized by a DEP approval pursuant to General Permit No. WMGR096 for the beneficial use of regulated fill. Soil utilized under this Subcondition 52.c.ii shall not be considered a waste for the purposes of fee and daily volume determinations.

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- d. No material other than soil meeting clean fill requirements or dewatered dredge material, if authorized pursuant to a dewatering determination, shall be utilized in the construction of the final cover at the landfill.

RADIATION MONITORING ACTION PLAN

53. This permit also approves the Radiation Protection Action Plan for Solid Waste (RPAP), consisting of approval of a radiation monitoring, detection and action plan received on February 5, 2014, and revised on March 12, 2015.
- a. Pursuant to Section 613 of the Solid Waste Management Act, 35 P.S. Section 6018.613, DEP may recover its costs to abate a public nuisance related to radioactive waste including its costs of management, transport, and disposal of the radioactive waste processed, stored, disposed, or rejected at the facility.
- b. Approval of this permit modification does not guarantee operational effectiveness. Failure to operate this equipment to perform as intended or designed, and to implement the Action Plan according to the application documents herein approved, for any reason, shall be sufficient grounds for revocation or suspension of the facility's waste permit in part or in its entirety.

FINANCIAL ASSURANCE

54. A valid and current certificate of liability insurance shall be maintained at the facility. A copy of the current certificate, listing DEP as a certificate holder and providing a 60-day notice period prior to cancellation or termination, shall be submitted to DEP's Southeast Regional Office, Waste Management Program, as required by 25 Pa. Code § 271.374 of the municipal waste regulations.

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55. The bond between the Waste Management of Fairless, LLC and DEP in the amount of \$79,975,618.00 is hereby approved as part of this permit. The permittee shall update the existing facility's bond within 45 days from the issuance of this permit to meet the above bonding amount requirement. Thereafter, upon receipt of written notice from DEP, Waste Management of Fairless, LLC must submit an updated bond within 90 days in accordance with Chapter 271 of the municipal waste regulations.

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ATTACHMENT-I

- I. Municipal incinerator ash as ADCM subject to the following conditions:
- a. pH of the ash must be less than 12.5 standard units.
 - b. Moisture content must be within the range of 10 to 30 percent.
 - c. Ash for use as an ADCM must originate from generators with functioning metal recovery operations and shall not contain large metal pieces.
 - d. The thickness of the ash layer applied as ADCM must be sufficient to provide adequate coverage of waste to meet the daily cover performance standards, but shall be no more than six inches in depth. Where a six-inch depth is not sufficient to provide adequate coverage, better waste compaction shall be practiced or other approved daily cover materials shall be utilized in place of ash.
 - e. Storage of ash shall be within the working area such that any runoff from the ash shall be contained within the landfill's leachate collection system.
 - f. Testing of incoming ash, whether for disposal or use as an ADCM, shall comply with approved waste acceptance procedures as contained in this permit.
 - g. This approval is restricted to municipal incinerator ash. The permittee shall provide written notification to DEP of the generator(s) ash being utilized as ADCM. Said notification shall be provided prior to the use of the ash as an ADCM.
- II. The following materials have received previous approvals (approving region noted in parentheses) for use as ADCM, which may or may not have been included on the statewide-approved equivalency list. Based upon the DEP's Policy and Procedure for Municipal Waste Facility Equivalency Approvals, the permittee is authorized to utilize these materials, subject to the similar terms and conditions of their individual approvals, at the Fairless Landfill. Failure of any of these materials to perform satisfactorily at the Fairless Landfill, or failure of the permittee to comply with the terms

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and conditions upon which the original reviewing region based its approval, shall be grounds for revocation of the approval herein granted:

- Fly ash conditioned with cement kiln dust (SERO).
- USDA clay loam soil texture classification (NWRO).
- Sanifoam (SERO).
- RUSMAR AC-6454 Long Duration Foam (SWRO).
- 3ML-9791 Foam (SWRO).
- Geosynthetic tarps (NWRO).
- Automobile shredder residue (NERO).

III. Recycled paper deinking sludge (RPDS) subject to the following conditions:

- a. Approval for use of RPDS as alternate daily cover is limited to the RPDS generated by Hagerstown Fiber Limited and Marcal Paper Mills, Inc. (KAOFIN), at this time. Other sources of RPDS may not be used as alternate daily cover without first obtaining written approval from DEP.
- b. If DEP determines, upon inspection that the RPDS is not meeting the daily cover performance standards specified in Section 273.232(b), the permittee must:
 - i. Upon notification from DEP, immediately cease the use of RPDS as landfill alternate daily cover. Notification can be in the form of an inspection report.
 - ii. Submit to DEP a report, which explains why the RPDS is not adequately meeting the performance standard(s), as well as what steps will be taken to improve the quality of the alternate daily cover and prevent noncompliance with Section 273.232(b).

Under the above circumstances, the RPDS may not be utilized until DEP is satisfied that the continued use of RPDS will not result in noncompliance with Section 273.232(b). In the event the alternate daily cover cannot meet the required performance standards, DEP reserves the right to revoke approval.

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- c. A five-day supply of daily cover soil material shall also be maintained on the site as required by Section 273.232(d), in the event that the RPDS does not comply with the performance standards as outlined in Attachment-I(III)(b), above.
- d. RPDS may not be applied as alternate daily cover within forty (40) linear feet of an exterior side slope. If in the judgment of DEP, the RPDS is determined to be a causative agent in the generation of leachate seeps, DEP may suspend the use of RPDS as landfill daily cover.
- e. The RPDS material should be dewatered to thirty-five percent (35%) to sixty percent (60%) solids contents. The permittee must verify the solids content of incoming RPDS.
- f. RPDS may not be stored/stockpiled at the landfill for greater than twenty-four (24) hours; i.e., this material is intended to be utilized for daily cover purpose as it is generated on a daily basis. All RPDS must be stored/stockpiled on the lined landfill area.

IV. Coal Ash, as subject to waste placement within 24 hours and as subject to the following conditions:

- a. The testing of incoming ash, whether for disposal or use as ADCM, shall comply with approved waste acceptance procedures and the Form U approved by DEP for that source of coal ash.
- b. Coal ash is not to be utilized as ADCM under adverse weather conditions, including periods of rain, snow or excessive wind.
- c. Coal ash is to be used as ADCM only when it is covered by additional solid waste the next day.
- d. Storage of coal ash shall be within the working area, including the establishment of a berm, such that any runoff from coal ash storage is contained within the landfill's leachate collection system.
- e. If, at any time, the coal ash presents a problem related to erosion, dust off-site tracking or traffic ability, its use as ADCM shall be discontinued until such time as the problem(s) are resolved to the satisfaction of DEP.

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- f. Coal ash approved for use as ADCM shall be analyzed quarterly or when the coal ash source is changed, whichever occurs first, using the chemical parameters contained in the Bureau of Mining and Reclamation Module 25. DEP will consider a reduction in analytical frequency to once annually if, after a minimum of four quarterly analyses, the coal ash demonstrates no significant differences in the analysis of variance (ANOVA) of the total concentrations (mg/kg) for each of the Module 25 metals analyzed, including boron and sodium, and the coal ash's pH shows no significant variances.
- g. Coal ash produced at the U.S. Gen New England, Inc. Brayton Point Station, Somerset, Massachusetts, is approved for use as ADCM conditioned upon continued compliance with this sub-condition. New sources may be approved by DEP in writing based upon sufficient demonstration by the permittee that the physical and chemical properties of the coal ash from the new source is suitable for both (1) disposal at this landfill and (2) use as ADCM consistent with this sub-condition.
- V. Processed construction and demolition waste material: The source of processed C&D material approved in this permit modification will be the STAR ADC materials (sized at two-inch minus material) produced at STAR's Vorick II facility in Brooklyn, NY; Recovermat, Waste Management of New Jersey, Inc., Amboy Facility; Karta Industries, Inc., in Peekskill, New York; the Gun Hill Facility located at 620-636 Truxton Street, Bronx, New York; the Mercer Group International of New Jersey Material Recovery Facility, Mercer County, New Jersey; and the Eagle Recycling of New Jersey Materials Recycling Facility, Hudson County, New Jersey subject to the following conditions:
- a. Areas upon which processed C&D material has been used must be covered with either conventional daily cover (soil) or additional waste within seven (7) days.
- b. Storage or stockpiling of any approved processed C&D alternate daily cover, as approved by this permit modification, shall not occur off the lined area of the landfill without obtaining written DEP approval. In addition, the stockpile areas must have appropriate erosion and sedimentation controls in place before stockpiling is initiated.
- c. If DEP inspections indicate an alternate daily cover approved by this permit modification is not meeting the daily cover performance standards specified in 25 Pa. Code § 273.232, the permittee must:

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- i. Upon notification by DEP, immediately cease the use of the alternate daily cover. Notification can be in the form of an inspection report.
- ii. Submit a report to DEP which explains why the alternate cover material is not meeting the applicable performance standards, and what steps will be implemented to improve the quality of the alternate daily cover and prevent noncompliance with 25 Pa. Code § 273.232.

Under the above circumstances, the alternate daily cover may not be utilized until DEP is satisfied that the continued use of the alternate daily cover will not result in noncompliance with 25 Pa. Code § 273.232. In the event the alternate daily cover cannot meet the required performance standards, DEP reserves the right to revoke approval.

- d. Each source of the processed construction and demolition material must be pre-approved in writing by DEP.
- e. Testing of incoming C&D materials, whether for disposal or use as an ADCM, shall comply with approved waste acceptance procedures.
- f. The thickness of processed C&D layer applied as ADCM must be sufficient to provide adequate coverage of waste to meet the daily cover performance standards, and shall be between six (6) to twelve (12) inches in depth. Where a 12-inch depth is not sufficient to provide adequate coverage, better waste compaction shall be practiced or other approved daily cover materials shall be utilized in place of processed C&D.

VI. Propat (patented processed Auto Shred Material produced by Prolerized Schiabo Neu Company) and Fairo Cover (shredded auto fluff produced by Fairless Iron and Metal, LLC) as an ADCM subject to the following conditions:

- a. This approval is limited to the Propat material produced by Prolerized Schiabo Neu Company and Fairo Cover produced by Fairless Iron and Metal, LLC. Failure of either of these products to perform satisfactorily at the Fairless Landfill, or failure of the permittee to

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comply with the terms and conditions upon which the original issuing region based its approval, shall be grounds for revocation of the approval here in granted.

- b. The ADCM as received must have a moisture content, and contain cementitious material, as described in the manufacturer's process information, sufficient at all times to allow the material to meet the daily cover performance standards, but at no time shall the moisture content be below fifteen percent (15%).
- c. The ADCM as received must be shredded to particle size no greater than two (2) inches.
- d. Prior to utilizing the ADCM, the permittee shall obtain, and keep available at the site for DEP review, copies of the applicable permit approvals from the original issuing region. The permittee is responsible for demonstrating compliance with the terms and conditions of the original approval of the ADCM.
- e. Areas upon which the material has been used as an ADCM must be covered with either conventional daily cover (soil) or additional waste within seven (7) days. The material may also be used as an ADCM on the leading edge of the fluff lift layer of waste in newly constructed cells. The ADCM is considered waste received and disposed.
- f. The stormwater from this ADCM shall be treated as leachate and be diverted into the landfill's leachate collection system.

VII. Posi-Shell as an ADCM subject to the following conditions:

- a. This approval is limited to the Posi-Shell material that received approval as an ADCM and is listed on the statewide approved equivalency list. Based upon DEP's Policy and Procedure for Municipal Waste Facility Equivalency Approvals, the permittee is authorized to utilize this product, subject to the terms and conditions of its original approval, at GROWS North Landfill. Failure of this product to perform satisfactorily at GROWS North Landfill or failure of the permittee to comply with the terms and conditions upon which the original issuing region based its approval shall be grounds for revocation of the approval herein granted.

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- b. Areas where Posi-Shell has been used must be broken up (cracked) before additional waste is placed on top.
- c. Posi-Shell may not be used as an alternate daily cover in the following areas:
 - i. Each partial lift for which the operator intends to place no additional waste for three (3) days.
 - ii. Each partial or completed lift that represents final permitted elevations for that part of the facility.

VIII. Nonpetroleum Contaminated Soil as an ADCM subject to the following conditions:

- a. This approval is limited to the Nonpetroleum Contaminated Soil that received approval as an ADCM from the Southcentral Regional Office and is listed on the statewide approval equivalency list. Based upon DEP's policy and procedure for municipal waste facility equivalency approvals, this ADCM may be approved via a minor modification for use at GROWS North Landfill. Failure of this material to perform satisfactorily at GROWS North Landfill or failure of the permittee to comply with the terms and conditions upon which the original issuing region based its approval shall be grounds for revocation of the approval herein granted.
- b. All ADCM that does not meet DEP's current Management of Fill policy must be managed and stored on a lined area of the landfill.
- c. Soil contaminated with residual waste listed in Attachment-II, below, qualifies for use as daily cover, under the following conditions:
 - i. The primary source of soil contamination is approved for disposal in accordance with the facility's Form R, Waste Analysis and Classification Plan, approval criteria.
 - ii. It can be demonstrated that the soil meets the performance standards and design requirements of Section 273.232 of the Solid Waste Regulations.

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- iii. ADCM consists primarily of soil, meeting the approximate maximum percentage of contaminants listed on Attachment-1. Percentage may be calculated if actual quantities are known, or estimated using any available data.
 - d. In addition to the residual waste contaminated soils listed in Attachment-II, soils containing approximately twenty-five percent (25%) or less of Construction and Demolition Waste may be used as daily cover, provided that the daily cover is composed of materials that are primarily six (6) inches in diameter or smaller.
 - e. All Nonpetroleum Contaminated Soil used as an ADCM is a waste and not a recyclable material, and counts towards the ADV of the facility. This waste is subject to the host municipality benefit fee(s) of Act 101.
 - f. The stormwater from this ADCM shall be treated as leachate and be diverted into the landfill's leachate collection system.
- IX. The geosynthetic tarp material approved for use as ADCM is the Intertape Polymer Group's NovaShield® brand RU88X-6(FR) that is flame retardant and resistant to wind, abrasion, flex, and UV damage, as presented in Attachment E referenced in Permit Condition No. 1, above. Use of this geosynthetic tarp material is also subject to the following requirements:
- a. A shipment of the geosynthetic tarp may not be used for ADCM unless the shipment is accompanied by a Quality Assurance statement from the manufacturer indicating that the material conforms with the typical properties for that product.
 - b. If the geosynthetic tarp material does not meet the performance standards in Section 273.232(b), the permittee shall immediately cease use of the geosynthetic tarp and utilize other approved materials for daily cover. In lieu of soil cover, the permittee may apply another ADCM that has been approved for use at the facility in accordance with the specifications set forth in that ADCM approval.
 - c. A geosynthetic tarp panel may not be deployed for more than 48 consecutive hours in an area. After that time, the area must be covered with conventional daily cover (soil) if the area is to remain inactive or is to receive no additional waste as part of routine disposal operations.

THIS PERMIT IS NON - TRANSFERABLE

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

**Permit
For
Solid Waste Disposal and/or Processing Facility
FORM NO. 8**

Permit No.	101699
Date Issued	July 3, 2024
Date Expired	March 30, 2026

- d. The permittee shall deploy geosynthetic tarps utilizing a Tarpomatic automatic tarping machine and only when panels are capable of providing complete and unbroken coverage of the working face. Any panel that cannot provide complete and unbroken coverage of the working face shall not be used until it has been properly repaired by the permittee. Visual inspection of the tarps shall be performed by the permittee weekly, at a minimum, or more frequently as needed to ensure the panels are not damaged.

For purposes of compliance with this condition, a geosynthetic tarp panel must be repaired or retired when a breach of any kind allows the underlying waste to be visually discernible. A breach will be considered properly repaired when the disjoined elements forming the boundaries of the breach are connected in a way that reestablishes the continuity of the cover, and is capable of withstanding the conditions typically associated with the use of the panel so that the breach does not recur.

- e. Once deployed, all panels must be adequately anchored to restrict movement of the cover by the wind, reduce the likelihood of associated wind damage, and prevent lateral escape of odors or intrusion of vectors. The permittee shall place panels with a minimum of three-foot overlap on to the existing cover or adjacent panel. When multiple panels are deployed, the placement shall produce a shingled effect that facilitates the run-off of surface water.
- f. The geosynthetic tarps may be placed on either side of an installed gas well provided that soil strips are then used as daily cover around the gas well itself.
- g. A five-day supply of conventional soil cover material shall be maintained on-site for use to readily augment or replace geosynthetic tarp material.
- h. After a geosynthetic tarp is placed as ADCM at the end of the working day, vehicular or equipment maneuvering over the tarp material shall be minimized by the permittee to the extent necessary to prevent damage to the tarp material while in place.
- i. At such time when the geosynthetic tarp material has deteriorated to the point that it is no longer effective as a daily cover, the tarp must be thoroughly shredded by repeated passes of a compactor, or must be folded over to the point it cannot be folded further, before disposing of it in the landfill.

THIS PERMIT IS NON - TRANSFERABLE

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENTPermit
For
Solid Waste Disposal and/or Processing Facility
FORM NO. 8Permit No. 101699
Date Issued July 3, 2024
Date Expired March 30, 2026**ATTACHMENT-II**

(Refer to Condition 51 and Attachment-I (VIII))

<u>RWC</u>	<u>Description</u>	<u>Max. Allowable Percent in Soil</u>
001	Coal-derived Bottom Ash	25 Percent
002	Coal-derived Fly Ash	25 Percent
004	Incinerator Bottom Ash	25 Percent
006	Incinerator Mixed Ash	25 Percent
101	Foundry Sand	25 Percent
102	Slag	25 Percent
103	Refractory Material	25 Percent
107	Ferrous Scrap, including Auto Recycle	10 Percent
206	Paint, Coating Sludge, and Scale	10 Percent
306	Surface Coatings (to be individually requested with waste approval)	25 Percent
313	Wax, Paraffin	25 Percent
406	Class Wastes excluding Industrial Refractory Material	25 Percent
413	Asphalt (Bituminous)	25 Percent
414	Ceramic Wastes	25 Percent
504	Paints (liquids)	10 Percent
506	Nonhazardous Metals Contaminated Soils	25 Percent
902	Nonhazardous Residual from Treatment of D002-D008 Hazardous Waste	

Re 30 (hmw24wm) 185-1

THIS PERMIT IS NON - TRANSFERABLE

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TAB 3

NPDES Permit



pennsylvania
DEPARTMENT OF ENVIRONMENTAL
PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

**AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE REQUIREMENTS FOR INDUSTRIAL WASTEWATER
FACILITIES**

NPDES PERMIT NO: PA0244856

In compliance with the provisions of the Clean Water Act, 33 U.S.C. Section 1251 *et seq.* ("the Act") and Pennsylvania's Clean Streams Law, as amended, 35 P.S. Section 691.1 *et seq.*,

**Waste Management of Fairless, LLC
1000 New Ford Mill Road
Morrisville, PA 19067-3704**

is authorized to discharge from a facility known as **Fairless Landfill**, located in **Falls Township, Bucks County**, to **Delaware River (WWF, MF)**, and **unnamed tributary to Delaware River (WWF, MF)** in Watershed(s) **2-E** in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts A, B and C hereof.

THIS PERMIT SHALL BECOME EFFECTIVE ON JANUARY 1, 2022

THIS PERMIT SHALL EXPIRE AT MIDNIGHT ON DECEMBER 31, 2026

The authority granted by this permit is subject to the following further qualifications:

1. If there is a conflict between the application, its supporting documents and/or amendments and the terms and conditions of this permit, the terms and conditions shall apply.
2. Failure to comply with the terms, conditions or effluent limitations of this permit is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. (40 CFR 122.41(a))
3. A complete application for renewal of this permit, or notice of intent to cease discharging by the expiration date, must be submitted to DEP at least 180 days prior to the above expiration date (unless permission has been granted by DEP for submission at a later date), using the appropriate NPDES permit application form. (40 CFR 122.41(b), 122.21(d)(2))

In the event that a timely and complete application for renewal has been submitted and DEP is unable, through no fault of the permittee, to reissue the permit before the above expiration date, the terms and conditions of this permit, including submission of the Discharge Monitoring Reports (DMRs), will be automatically continued and will remain fully effective and enforceable against the discharger until DEP takes final action on the pending permit application. (25 Pa. Code §§ 92a.7 (b), (c))

4. This NPDES permit does not constitute authorization to construct or make modifications to wastewater treatment facilities necessary to meet the terms and conditions of this permit.

DATE PERMIT ISSUED _____

ISSUED BY _____

**Thomas L. Magge
Environmental Program Manager
Southeast Regional Office**

Permit No. PA0244856

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. A. For Outfall 001, Latitude 40° 8' 45.60", Longitude 74° 45' 23.40", River Mile Index, Stream Code 00002

Receiving Waters: Delaware River (WWF, MF)

Type of Effluent: Stormwater from the watershed for Sedimentation Basin No.1

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.
2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations					Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)			Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Quarterly	Daily Maximum		
pH (S.U.)	XXX	XXX	XXX	Report	Report	1/quarter	Grab
Color (Pt-Co Units) (Pt-Co Units)	XXX	XXX	XXX	Report	Report	1/quarter	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD5)	XXX	XXX	XXX	Report	Report	1/quarter	Grab
Chemical Oxygen Demand (COD)	XXX	XXX	XXX	Report	Report	1/quarter	Grab
Total Suspended Solids	XXX	XXX	XXX	Report	Report	1/quarter	Grab
Total Dissolved Solids	XXX	XXX	XXX	Report	Report	1/quarter	Grab
Oil and Grease	XXX	XXX	XXX	Report	Report	1/quarter	Grab
Nitrate-Nitrite as N	XXX	XXX	XXX	Report	Report	1/quarter	Grab
Ammonia-Nitrogen	XXX	XXX	XXX	Report	Report	1/quarter	Grab
Arsenic, Total	XXX	XXX	XXX	Report	Report	1/quarter	Grab
Barium, Total	XXX	XXX	XXX	Report	Report	1/quarter	Grab
Cadmium, Total	XXX	XXX	XXX	Report	Report	1/quarter	Grab

Permit No. PA0244856

Outfall 001, Continued (from Permit Effective Date through Permit Expiration Date)

Parameter	Effluent Limitations						Monitoring Requirements		
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)			Instant. Maximum	Minimum ⁽²⁾ Measurement Frequency	Required Sample Type	
	Average Monthly	Average Weekly	Minimum	Average Quarterly	Daily Maximum				
Chromium, Total	XXX	XXX	XXX	Report	Report	XXX	1/quarter	Grab	
Cyanide, Total	XXX	XXX	XXX	Report	Report	XXX	1/quarter	Grab	
Iron, Dissolved	XXX	XXX	XXX	Report	Report	XXX	1/quarter	Grab	
Iron, Total	XXX	XXX	XXX	Report	Report	XXX	1/quarter	Grab	
Lead, Total	XXX	XXX	XXX	Report	Report	XXX	1/quarter	Grab	
Magnesium, Dissolved	XXX	XXX	XXX	Report	Report	XXX	1/quarter	Grab	
Magnesium, Total	XXX	XXX	XXX	Report	Report	XXX	1/quarter	Grab	
Mercury, Total	XXX	XXX	XXX	Report	Report	XXX	1/quarter	Grab	
Selenium, Total	XXX	XXX	XXX	Report	Report	XXX	1/quarter	Grab	
Silver, Total	XXX	XXX	XXX	Report	Report	XXX	1/quarter	Grab	
Sulfate, Total	XXX	XXX	XXX	Report	Report	XXX	1/quarter	Grab	
Tritium, Total (pCi/L)	XXX	XXX	XXX	Report	Report	XXX	1/quarter	Grab	
1,4-Dioxane	XXX	XXX	XXX	Report	Report	XXX	1/year	Grab	
Chloride	XXX	XXX	XXX	Report	Report	XXX	1/quarter	Grab	
Bromide	XXX	XXX	XXX	Report	Report	XXX	1/quarter	Grab	
Total Organic Carbon	XXX	XXX	XXX	Report	Report	XXX	1/quarter	Grab	

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): at Outfall 001

Permit No. PA0244856

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. B. For Outfall 002, Latitude 40° 8' 46.67", Longitude 74° 45' 16.91", River Mile Index, Stream Code 00002

Receiving Waters: Delaware River (WWF, MF)

Type of Effluent: Stormwater from the watershed for Sedimentation Basin No.2

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.
2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations					Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)			Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Quarterly	Daily Maximum		
pH (S.U.)	XXX	XXX	XXX	Report	Report	1/quarter	Grab
Color (Pt-Co Units) (Pt-Co Units)	XXX	XXX	XXX	Report	Report	1/quarter	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD5)	XXX	XXX	XXX	Report	Report	1/quarter	Grab
Chemical Oxygen Demand (COD)	XXX	XXX	XXX	Report	Report	1/quarter	Grab
Total Suspended Solids	XXX	XXX	XXX	Report	Report	1/quarter	Grab
Total Dissolved Solids	XXX	XXX	XXX	Report	Report	1/quarter	Grab
Oil and Grease	XXX	XXX	XXX	Report	Report	1/quarter	Grab
Nitrate-Nitrite as N	XXX	XXX	XXX	Report	Report	1/quarter	Grab
Ammonia-Nitrogen	XXX	XXX	XXX	Report	Report	1/quarter	Grab
Arsenic, Total	XXX	XXX	XXX	Report	Report	1/quarter	Grab
Barium, Total	XXX	XXX	XXX	Report	Report	1/quarter	Grab

Outfall 002, Continued (from Permit Effective Date through Permit Expiration Date)

Permit No. PA0244856

Parameter	Effluent Limitations					Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)			Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Quarterly	Daily Maximum	Instant. Maximum	
Cadmium, Total	XXX	XXX	XXX	Report	Report	XXX	1/quarter Grab
Chromium, Total	XXX	XXX	XXX	Report	Report	XXX	1/quarter Grab
Cyanide, Total	XXX	XXX	XXX	Report	Report	XXX	1/quarter Grab
Iron, Dissolved	XXX	XXX	XXX	Report	Report	XXX	1/quarter Grab
Iron, Total	XXX	XXX	XXX	Report	Report	XXX	1/quarter Grab
Lead, Total	XXX	XXX	XXX	Report	Report	XXX	1/quarter Grab
Magnesium, Dissolved	XXX	XXX	XXX	Report	Report	XXX	1/quarter Grab
Magnesium, Total	XXX	XXX	XXX	Report	Report	XXX	1/quarter Grab
Mercury, Total	XXX	XXX	XXX	Report	Report	XXX	1/quarter Grab
Selenium, Total	XXX	XXX	XXX	Report	Report	XXX	1/quarter Grab
Silver, Total	XXX	XXX	XXX	Report	Report	XXX	1/quarter Grab
Sulfate, Total	XXX	XXX	XXX	Report	Report	XXX	1/quarter Grab
Tritium, Total (pCi/L)	XXX	XXX	XXX	Report	Report	XXX	1/quarter Grab
1,4-Dioxane	XXX	XXX	XXX	Report	Report	XXX	1/quarter Grab
Chloride	XXX	XXX	XXX	Report	Report	XXX	1/year Grab
Bromide	XXX	XXX	XXX	Report	Report	XXX	1/quarter Grab
Total Organic Carbon	XXX	XXX	XXX	Report	Report	XXX	1/quarter Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): at Outfall 002

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. C. For Outfall 003, Latitude 40° 9' 10.92", Longitude 74° 45' 53.41", River Mile Index, Stream Code 00002

Receiving Waters: Delaware River (WWF, MF)

Type of Effluent: Stormwater from the watershed for Sedimentation Basin No.3

1. The permittee is authorized to discharge during the period from **Permit Effective Date** through **Permit Expiration Date**.
2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations					Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)			Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Quarterly	Daily Maximum		
pH (S.U.)	XXX	XXX	XXX	Report	Report	1/quarter	Grab
Color (Pt-Co Units) (Pt-Co Units)	XXX	XXX	XXX	Report	Report	1/quarter	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD5)	XXX	XXX	XXX	Report	Report	1/quarter	Grab
Chemical Oxygen Demand (COD)	XXX	XXX	XXX	Report	Report	1/quarter	Grab
Total Suspended Solids	XXX	XXX	XXX	Report	Report	1/quarter	Grab
Total Dissolved Solids	XXX	XXX	XXX	Report	Report	1/quarter	Grab
Oil and Grease	XXX	XXX	XXX	Report	Report	1/quarter	Grab
Nitrate-Nitrite as N	XXX	XXX	XXX	Report	Report	1/quarter	Grab
Ammonia-Nitrogen	XXX	XXX	XXX	Report	Report	1/quarter	Grab
Arsenic, Total	XXX	XXX	XXX	Report	Report	1/quarter	Grab
Barium, Total	XXX	XXX	XXX	Report	Report	1/quarter	Grab
Cadmium, Total	XXX	XXX	XXX	Report	Report	1/quarter	Grab

Outfall 003, Continued (from Permit Effective Date through Permit Expiration Date)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)			Instant. Maximum	Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Quarterly	Daily Maximum			
Chromium, Total	XXX	XXX	XXX	Report	Report	XXX	1/quarter	Grab
Cyanide, Total	XXX	XXX	XXX	Report	Report	XXX	1/quarter	Grab
Iron, Dissolved	XXX	XXX	XXX	Report	Report	XXX	1/quarter	Grab
Iron, Total	XXX	XXX	XXX	Report	Report	XXX	1/quarter	Grab
Lead, Total	XXX	XXX	XXX	Report	Report	XXX	1/quarter	Grab
Magnesium, Dissolved	XXX	XXX	XXX	Report	Report	XXX	1/quarter	Grab
Magnesium, Total	XXX	XXX	XXX	Report	Report	XXX	1/quarter	Grab
Mercury, Total	XXX	XXX	XXX	Report	Report	XXX	1/quarter	Grab
Selenium, Total	XXX	XXX	XXX	Report	Report	XXX	1/quarter	Grab
Silver, Total	XXX	XXX	XXX	Report	Report	XXX	1/quarter	Grab
Sulfate, Total	XXX	XXX	XXX	Report	Report	XXX	1/quarter	Grab
Tritium, Total (pCi/L)	XXX	XXX	XXX	Report	Report	XXX	1/quarter	Grab
1,4-Dioxane	XXX	XXX	XXX	Report	Report	XXX	1/year	Grab
Chloride	XXX	XXX	XXX	Report	Report	XXX	1/quarter	Grab
Bromide	XXX	XXX	XXX	Report	Report	XXX	1/quarter	Grab
Total Organic Carbon	XXX	XXX	XXX	Report	Report	XXX	1/quarter	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): at Outfall 003

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. D. For Outfall 005 , Latitude 40° 7' 59.00" , Longitude 74° 45' 56.00" , River Mile Index 0.8500 , Stream Code 00002

Receiving Waters: Delaware River (WWF, MF)

Type of Effluent: IW Process Effluent with ELG from Leachate Treatment Plant

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations					Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)			Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum Monthly Average	Average Monthly	Daily Maximum		
Flow (MGD)	0.30	XXX	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	1/day	Grab
Dissolved Oxygen	XXX	XXX	4.0 Inst Min	XXX	XXX	1/week	Grab
Total Residual Chlorine *****	XXX	XXX	0.5 Avg Mo	1.0 Daily Max	XXX	1/day	Grab
Color (Pt-Co Units) (Pt-Co Units)	XXX	XXX	XXX	XXX	XXX	1/week	Grab
Temperature (deg F) (°F)	XXX	XXX	XXX	XXX	XXX	1/day	I-S
Biochemical Oxygen Demand (BOD5)	44.4	88.6	XXX	30	60	1/week	24-Hr Composite
Biochemical Oxygen Demand (BOD5)	XXX	XXX	95.0	XXX	XXX	1/week	Calculation
Percent Removal	Report	XXX	XXX	Report	XXX	1/week	24-Hr Composite
Industrial Influent	75	150	XXX	30	60	1/week	24-Hr Composite

Outfall 005, Continued (from Permit Effective Date through Permit Expiration Date)

Parameter	Effluent Limitations					Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)			Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum Monthly Average	Average Monthly	Daily Maximum		
Total Suspended Solids Industrial Influent	Report	XXX	XXX	Report	XXX	XXX	24-Hr Composite
Total Suspended Solids Percent Removal	XXX	XXX	90.0	XXX	XXX	XXX	Calculation
Total Dissolved Solids	XXX	XXX	XXX	15000	20000	25000	24-Hr Composite
Oil and Grease	37.5	75	15.0 Avg Mo	30.0 Daily Max	XXX	30.0	Grab
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000 *	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	Grab
Nitrate-Nitrite as N	XXX	XXX	XXX	Report	Report	XXX	24-Hr Composite
Total Nitrogen	XXX	XXX	XXX	Report	Report	XXX	24-Hr Composite
Ammonia-Nitrogen	12.26	25.0	XXX	4.9	10	15	24-Hr Composite
Total Phosphorus	XXX	XXX	XXX	Report	Report	XXX	24-Hr Composite
Aluminum, Total	0.688	1.376	XXX	0.275	0.550	0.68	24-Hr Composite
Antimony, Total	1.13	2.26	XXX	0.450	0.900	1.13	24-Hr Composite
Arsenic, Total	0.375	0.750	XXX	0.150	0.300	0.375	24-Hr Composite
Barium, Total	0.250	0.500	XXX	0.100	0.200	0.25	24-Hr Composite
Beryllium, Total	0.0125 Avg Qrtly	0.0250	XXX	0.005 Avg Qrtly	0.010	0.0125	24-Hr Composite
Boron, Total	Report	Report	XXX	Report	Report	XXX	24-Hr Composite
Boron, Total Industrial Influent	Report	Report	XXX	Report	Report	XXX	24-Hr Composite

Outfall 005, Continued (from Permit Effective Date through Permit Expiration Date)

Parameter	Effluent Limitations					Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)			Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum Monthly Average	Average Monthly	Daily Maximum		
Boron, Total Percent Removal	XXX	XXX	10.0	XXX	XXX	1/week	Calculation 24-Hr
Cadmium, Total	0.0125	0.0250	XXX	0.005	0.010	1/month	Composite
Chromium, Hexavalent	XXX	XXX	XXX	Report	Report	1/month	Composite
Chromium, Total	0.375	0.750	XXX	0.150	0.300	1/month	Composite
Cobalt, Total	0.125 Avg Qrtly	0.250	XXX	0.050 Avg Qrtly	0.100	1/quarter	Composite
Copper, Total	0.125	0.250	XXX	0.050	0.100	1/month	Composite
Cyanide, Total	0.187	0.375	XXX	0.075	0.150	1/month	Composite
Iron, Total	6.25	12.50	XXX	2.5	5.0	1/month	Composite
Lead, Total	0.090 2.5 Avg Qrtly	0.180	XXX	0.036 1.0 Avg Qrtly	0.072	1/month	Composite
Manganese, Total		5.0	XXX		2.0	1/quarter	Composite
Mercury, Total	0.001	0.002	XXX	0.0004	0.0008	1/month	Composite
Nickel, Total	0.500	1.0	XXX	0.2	0.4	1/month	Composite
Silver, Total	0.025	0.050	XXX	0.010	0.020	1/month	Composite
Thallium, Total	0.085	0.170	XXX	0.100	0.200	1/month	Composite
Tritium, Total (pCi/L)	XXX	XXX	XXX	XXX	Report	1/quarter	Calculation
Vanadium, Total	0.250	0.500	XXX	0.100	0.200	1/month	Composite
Zinc, Total	0.275	0.500	XXX	0.110	0.200	1/month	Composite

Parameter	Effluent Limitations					Monitoring Requirements		
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)					
	Average Monthly	Daily Maximum	Minimum Monthly Average	Average Monthly	Daily Maximum	Instant. Maximum	Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
4,4-DDD *****	0.00012	0.00012	XXX	0.00005	0.00005	0.00005	1/month	24-Hr Composite
4,4-DDT *****	0.00012	0.00012	XXX	0.00005	0.00005	0.00005	1/month	24-Hr Composite
4,4-DDE *****	0.00012	0.00012	XXX	0.00005	0.00005	0.00005	1/month	24-Hr Composite
2-Hexanone	0.038	0.075	XXX	0.015	0.030	0.037	1/month	24-Hr Composite
4-Methyl-2-pentanone	0.038	0.075	XXX	0.015	0.030	0.037	1/month	24-Hr Composite
Isopropanol	1.35	2.7	XXX	0.540	1.080	1.35	1/month	24-Hr Composite
Pentachlorophenol	XXX	XXX	XXX	Report	Report	XXX	1/month	24-Hr Composite
Phenol	0.038	0.065	XXX	0.015	0.026	0.037	1/month	24-Hr Composite
Acetone	0.273	0.546	XXX	0.11	0.218	0.273	1/month	Grab
a-Terpineol	0.040	0.082	XXX	0.016	0.033	0.04	1/month	24-Hr Composite
Chlorobenzene	XXX	XXX	XXX	0.050	0.100	0.125	1/month	Grab
1-Propanol	1.376	2.752	XXX	0.550	1.100	1.35	1/month	24-Hr Composite
Benzene	XXX	XXX	XXX	0.036	0.072	0.09	1/month	Grab
Benzidine	XXX	XXX	XXX	Report Avg Qrtly	Report	XXX	1/quarter	24-Hr Composite
Benzoic Acid	0.177	0.300	XXX	0.071	0.120	0.15	1/month	24-Hr Composite
Butyl Benzyl Phthalate	XXX	XXX	XXX	Report Avg Qrtly	Report	XXX	1/quarter	24-Hr Composite
Bromoform	XXX	XXX	XXX	Report	XXX	Report	1/quarter	24-Hr Composite

Outfall 005, Continued (from Permit Effective Date through Permit Expiration Date)

Parameter	Effluent Limitations					Monitoring Requirements		
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)			Instant. Maximum	Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum Monthly Average	Average Monthly	Daily Maximum			
Chlordane	XXX	XXX	XXX	Report Avg Qtrly	Report	XXX	1/quarter	24-Hr Composite
2-Butanone	0.525	1.050	XXX	0.210	0.420	0.525	1/month	Grab
1,1,1-Trichloroethane	XXX	XXX	XXX	Report Avg Qtrly	Report	XXX	1/quarter	Grab
1,2,3-Trichloropropane	0.250	0.500	XXX	0.100	0.200	0.25	1/month	Grab
1,1-Dichloroethane	XXX	XXX	XXX	Report Avg Qtrly	Report	XXX	1/quarter	Grab
1,2-Dichloroethane	XXX	XXX	XXX	Report Avg Qtrly	Report	XXX	1/quarter	Grab
Chloroform	XXX	XXX	XXX	0.010 Avg Qtrly	0.020	0.025	1/quarter	Grab
2-Chloronaphthalene	XXX	XXX	XXX	Report Avg Qtrly	Report	XXX	1/quarter	24-Hr Composite
Dieldrin	XXX	XXX	XXX	Report Avg Qtrly	Report	XXX	1/quarter	24-Hr Composite
Diethyl Phthalate	XXX	XXX	XXX	Report Avg Qtrly	Report	XXX	1/quarter	24-Hr Composite
Di-n-Butyl Phthalate	XXX	XXX	XXX	0.830	1.660	2.08	1/month	24-Hr Composite
gamma-BHC (Lindane)	XXX	XXX	XXX	Report Avg Qtrly	Report	XXX	1/quarter	24-Hr Composite
Heptachlor	XXX	XXX	XXX	Report Avg Qtrly	Report	XXX	1/quarter	24-Hr Composite
Heptachlor Epoxide	XXX	XXX	XXX	Report Avg Qtrly	Report	XXX	1/quarter	24-Hr Composite
Isophorone	XXX	XXX	XXX	Report Avg Qtrly	Report	XXX	1/quarter	24-Hr Composite
Dibromomethane	0.025	0.050	XXX	0.010	0.020	0.025	1/month	Grab
Methyl Chloride	XXX	XXX	XXX	Report Avg Qtrly	Report	XXX	1/quarter	Grab

Outfall 005, Continued (from Permit Effective Date through Permit Expiration Date)

Parameter	Effluent Limitations					Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)			Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum Monthly Average	Average Monthly	Daily Maximum		
Methylene Chloride	XXX	XXX	XXX	Report Avg Qrtly	Report	1/quarter	Grab
p-Cresol	0.035	0.063	XXX	0.014	0.025	1/month	24-Hr Composite
Phenolics, Total	0.675	1.351	XXX	0.270	0.540	1/month	24-Hr Composite
trans-1,2-Dichloroethylene	0.075 Avg Qrtly	0.150	XXX	0.030 Avg Qrtly	0.060	1/quarter	Grab
Tetrachloroethylene	XXX	XXX	XXX	Report Avg Qrtly	Report	1/quarter	Grab
Tetrahydrofuran	0.063	0.125	XXX	0.025	0.050	1/month	Grab
Toluene	XXX	XXX	XXX	Report Avg Qrtly	Report	1/quarter	Grab
Toxaphene	XXX	XXX	XXX	Report Avg Qrtly	Report	1/quarter	24-Hr Composite
Trichloroethylene	XXX	XXX	XXX	Report Avg Qrtly	Report	1/quarter	Grab
Trihalomethanes, Total ****	XXX	XXX	XXX	0.027	XXX	2/month	24-Hr Composite
Xylenes, Total	XXX	XXX	XXX	0.010	0.020	1/month	Grab
PCBs Dry Weather Analysis (pg/L) **	XXX	XXX	XXX	XXX	Report	1/6 months	24-Hr Composite
Gross Alpha Radioactivity (pCi/L)	XXX	XXX	XXX	Report	XXX	1/month	24-Hr Composite
Toxicity, Acute - Ceriodaphnia Survival (TUa) ***	XXX	XXX	XXX	XXX	10.2	1/quarter	24-Hr Composite
Toxicity, Chronic - Ceriodaphnia Survival (TUc)***	XXX	XXX	XXX	XXX	Report	1/quarter	24-Hr Composite
Toxicity, Chronic - Ceriodaphnia Reproduction (TUc) ***	XXX	XXX	XXX	XXX	Report	1/quarter	24-Hr Composite
Toxicity, Chronic - Pimephales Survival (TUc) ***	XXX	XXX	XXX	XXX	Report	1/quarter	24-Hr Composite

Outfall 005, Continued (from Permit Effective Date through Permit Expiration Date)

Parameter	Effluent Limitations					Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)			Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum Monthly Average	Average Monthly	Daily Maximum		
Toxicity, Chronic - Pimephales Growth (TUC) ***	XXX	XXX	XXX	XXX	Report	1/quarter	24-Hr Composite

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): at Outfall 005 (Formerly GROWS Outfall 001)

* See other requirement no. VI, ** See other requirement no. IV, *** See other requirement no. II, **** See other requirement no. I, G, and H, ***** See other requirement no. I, G., ***** See other requirement no. VII.

Permit No. PA0244856

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I.E. For Outfall 006, Latitude 40° 8' 14.00", Longitude 74° 46' 8.00", River Mile Index, Stream Code 00002

Receiving Waters: Delaware River (WWF, MF)

Type of Effluent: Stormwater from parking lot and maintenance yard.

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.
2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations					Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)			Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum	
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD5)	XXX	XXX	XXX	XXX	Report	XXX	Grab
Total Dissolved Solids	XXX	XXX	XXX	XXX	Report	XXX	Grab
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	Grab
Nitrate-Nitrite as N	XXX	XXX	XXX	XXX	Report	XXX	Grab
Ammonia-Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	Grab
Arsenic, Total	XXX	XXX	XXX	XXX	Report	XXX	Grab
Barium, Total	XXX	XXX	XXX	XXX	Report	XXX	Grab
Cadmium, Total	XXX	XXX	XXX	XXX	Report	XXX	Grab
Chromium, Total	XXX	XXX	XXX	XXX	Report	XXX	Grab
Cyanide, Total	XXX	XXX	XXX	XXX	Report	XXX	Grab

Outfall 006, Continued (from Permit Effective Date through Permit Expiration Date)

Parameter	Effluent Limitations					Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)			Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum	
Iron, Dissolved	XXX	XXX	XXX	XXX	Report	XXX	Grab
Lead, Total	XXX	XXX	XXX	XXX	Report	XXX	Grab
Magnesium, Dissolved	XXX	XXX	XXX	XXX	Report	XXX	Grab
Magnesium, Total	XXX	XXX	XXX	XXX	Report	XXX	Grab
Mercury, Total	XXX	XXX	XXX	XXX	Report	XXX	Grab
Selenium, Total	XXX	XXX	XXX	XXX	Report	XXX	Grab
Silver, Total	XXX	XXX	XXX	XXX	Report	XXX	Grab
Total Organic Carbon	XXX	XXX	XXX	XXX	Report	XXX	Grab
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	XXX	Grab
Chemical Oxygen Demand	XXX	XXX	XXX	XXX	XXX	XXX	Grab
Color (Pt-Co Units)	XXX	XXX	XXX	XXX	XXX	XXX	Grab
Total Tritium (pCi/L)	XXX	XXX	XXX	XXX	XXX	XXX	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): at Outfall 006 (Formerly GROWS Outfall 006)

Permit No. PA0244856

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. F. For Outfall 007, Latitude 40° 8' 19.00", Longitude 74° 46' 8.00", River Mile Index 0.8500, Stream Code 00002

Receiving Waters: Delaware River (WWF, MIF)

Type of Effluent: Stormwater from leachate treatment secondary containment

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.
2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations					Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)			Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum	
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD5)	XXX	XXX	XXX	XXX	Report	XXX	Grab
Total Dissolved Solids	XXX	XXX	XXX	XXX	Report	XXX	Grab
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	Grab
Nitrate-Nitrite as N	XXX	XXX	XXX	XXX	Report	XXX	Grab
Ammonia-Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	Grab
Arsenic, Total	XXX	XXX	XXX	XXX	Report	XXX	Grab
Barium, Total	XXX	XXX	XXX	XXX	Report	XXX	Grab
Cadmium, Total	XXX	XXX	XXX	XXX	Report	XXX	Grab
Chromium, Total	XXX	XXX	XXX	XXX	Report	XXX	Grab
Cyanide, Total	XXX	XXX	XXX	XXX	Report	XXX	Grab

Permit No. PA0244856

Outfall 007, Continued (from Permit Effective Date through Permit Expiration Date)

Parameter	Effluent Limitations					Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)			Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum		
Iron, Dissolved	XXX	XXX	XXX	XXX	Report	1/quarter	Grab
Lead, Total	XXX	XXX	XXX	XXX	Report	1/quarter	Grab
Magnesium, Dissolved	XXX	XXX	XXX	XXX	Report	1/quarter	Grab
Magnesium, Total	XXX	XXX	XXX	XXX	Report	1/quarter	Grab
Mercury, Total	XXX	XXX	XXX	XXX	Report	1/quarter	Grab
Selenium, Total	XXX	XXX	XXX	XXX	Report	1/quarter	Grab
Silver, Total	XXX	XXX	XXX	XXX	Report	1/quarter	Grab
Total Organic Carbon	XXX	XXX	XXX	XXX	Report	1/quarter	Grab
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	1/quarter	Grab
Chemical Oxygen Demand	XXX	XXX	XXX	XXX	Report	1/quarter	Grab
Color (Pt-Co Units)	XXX	XXX	XXX	XXX	Report	1/quarter	Grab
Total Tritium (pCi/L)	XXX	XXX	XXX	XXX	Report	1/quarter	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): at Outfall 007 (Formerly GROWS Outfall 002)

Permit No. PA0244856

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. G. For Outfall 009, Latitude 40° 8' 30.00", Longitude 74° 46' 4.00", River Mile Index, Stream Code 00002

Receiving Waters: Delaware River (WWF, MF)

Type of Effluent: Stormwater from impervious area surrounding leachate treatment system

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.
2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations					Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)			Minimum Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum	
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD5)	XXX	XXX	XXX	XXX	Report	XXX	Grab
Total Dissolved Solids	XXX	XXX	XXX	XXX	Report	XXX	Grab
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	Grab
Nitrate-Nitrite as N	XXX	XXX	XXX	XXX	Report	XXX	Grab
Ammonia-Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	Grab
Arsenic, Total	XXX	XXX	XXX	XXX	Report	XXX	Grab
Barium, Total	XXX	XXX	XXX	XXX	Report	XXX	Grab
Cadmium, Total	XXX	XXX	XXX	XXX	Report	XXX	Grab
Chromium, Total	XXX	XXX	XXX	XXX	Report	XXX	Grab
Cyanide, Total	XXX	XXX	XXX	XXX	Report	XXX	Grab
Iron, Dissolved	XXX	XXX	XXX	XXX	Report	XXX	Grab

Outfall 009, Continued (from Permit Effective Date through Permit Expiration Date)

Parameter	Effluent Limitations					Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)			Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum	
Lead, Total	XXX	XXX	XXX	XXX	Report	XXX	Grab
Magnesium, Dissolved	XXX	XXX	XXX	XXX	Report	XXX	Grab
Magnesium, Total	XXX	XXX	XXX	XXX	Report	XXX	Grab
Mercury, Total	XXX	XXX	XXX	XXX	Report	XXX	Grab
Selenium, Total	XXX	XXX	XXX	XXX	Report	XXX	Grab
Silver, Total	XXX	XXX	XXX	XXX	Report	XXX	Grab
Total Organic Carbon	XXX	XXX	XXX	XXX	Report	XXX	Grab
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	XXX	Grab
Chemical Oxygen Demand	XXX	XXX	XXX	XXX	Report	XXX	Grab
Color (Pt-Co Units)	XXX	XXX	XXX	XXX	Report	XXX	Grab
Total Tritium (pCi/L)	XXX	XXX	XXX	XXX	Report	XXX	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): at Outfall 009 (Formerly GROWS Outfall 009)

**PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS
(Continued)**

Additional Requirements

The permittee may not discharge:

1. Floating solids, scum, sheen or substances that result in observed deposits in the receiving water. (25 Pa Code § 92a.41(c))
2. Oil and grease in amounts that cause a film or sheen upon or discoloration of the waters of this Commonwealth or adjoining shoreline, or that exceed 15 mg/l as a daily average or 30 mg/l at any time (or lesser amounts if specified in this permit). (25 Pa. Code § 92a.47(a)(7), § 95.2(2))
3. Substances in concentration or amounts sufficient to be inimical or harmful to the water uses to be protected or to human, animal, plant or aquatic life. (25 Pa Code § 93.6(a))
4. Foam or substances that produce an observed change in the color, taste, odor or turbidity of the receiving water, unless those conditions are otherwise controlled through effluent limitations or other requirements in this permit. For the purpose of determining compliance with this condition, DEP will compare conditions in the receiving water upstream of the discharge to conditions in the receiving water approximately 100 feet downstream of the discharge to determine if there is an observable change in the receiving water. (25 Pa Code § 92a.41(c))

Footnotes

- (1) When sampling to determine compliance with mass effluent limitations, the discharge flow at the time of sampling must be measured and recorded.
- (2) This is the minimum number of sampling events required. Permittees are encouraged, and it may be advantageous in demonstrating compliance, to perform more than the minimum number of sampling events.

Supplemental Information

The effluent limitations for Outfall 005 were determined using an effluent discharge rate of 0.3 MGD.

II. DEFINITIONS

At Outfall (XXX) means a sampling location in outfall line XXX below the last point at which wastes are added to outfall line (XXX), or where otherwise specified.

Average refers to the use of an arithmetic mean, unless otherwise specified in this permit. (40 CFR 122.41(l)(4)(iii))

Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures and other management practices to prevent or reduce the pollutant loading to surface waters of the Commonwealth. The term also includes treatment requirements, operating procedures and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. The term includes activities, facilities, measures, planning or procedures used to minimize accelerated erosion and sedimentation and manage stormwater to protect, maintain, reclaim, and restore the quality of waters and the existing and designated uses of waters within this Commonwealth before, during and after earth disturbance activities. (25 Pa. Code § 92a.2)

Bypass means the intentional diversion of waste streams from any portion of a treatment facility. (40 CFR 122.41(m)(1)(i))

Calendar Week is defined as the seven consecutive days from Sunday through Saturday, unless the permittee has been given permission by DEP to provide weekly data as Monday through Friday based on showing excellent performance of the facility and a history of compliance. In cases when the week falls in two separate months, the month with the most days in that week shall be the month for reporting.

Clean Water Act means the Federal Water Pollution Control Act, as amended. (33 U.S.C.A. §§ 1251 to 1387).

Chemical Additive means a chemical product (including products of disassociation and degradation, collectively "products") introduced into a waste stream that is used for cleaning, disinfecting, or maintenance and which may be detected in effluent discharged to waters of the Commonwealth. The term generally excludes chemicals used for neutralization of waste streams, the production of goods, and treatment of wastewater.

Composite Sample (for all except GC/MS volatile organic analysis) means a combination of individual samples (at least eight for a 24-hour period or four for an 8-hour period) of at least 100 milliliters (mL) each obtained at spaced time intervals during the compositing period. The composite must be flow-proportional; either the volume of each individual sample is proportional to discharge flow rates, or the sampling interval is proportional to the flow rates over the time period used to produce the composite. (EPA Form 2C)

Composite Sample (for GC/MS volatile organic analysis) consists of at least four aliquots or grab samples collected during the sampling event (not necessarily flow proportioned). A separate analysis should be performed for each sample and the results should be averaged.

Daily Average Temperature means the average of all temperature measurements made, or the mean value plot of the record of a continuous automated temperature recording instrument, either during a calendar day or during the operating day if flows are of a shorter duration.

Daily Discharge means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day. (25 Pa. Code § 92a.2, 40 CFR 122.2)

Daily Maximum Discharge Limitation means the highest allowable "daily discharge."

Discharge Monitoring Report (DMR) means the DEP or EPA supplied form(s) for the reporting of self-monitoring results by the permittee. (25 Pa. Code § 92a.2, 40 CFR 122.2)

Estimated Flow means any method of liquid volume measurement based on a technical evaluation of the sources contributing to the discharge including, but not limited to, pump capabilities, water meters and batch discharge volumes.

Geometric Mean means the average of a set of n sample results given by the nth root of their product.

Grab Sample means an individual sample of at least 100 mL collected at a randomly selected time over a period not to exceed 15 minutes. (EPA Form 2C)

Hazardous Substance means any substance designated under 40 CFR Part 116 pursuant to Section 311 of the Clean Water Act. (40 CFR 122.2)

Hauled-In Wastes means any waste that is introduced into a treatment facility through any method other than a direct connection to the wastewater collection system. The term includes wastes transported to and disposed of within the treatment facility or other entry points within the collection system.

Immersion Stabilization (i-s) means a calibrated device is immersed in the wastewater until the reading is stabilized.

Instantaneous Maximum Effluent Limitation means the highest allowable discharge of a concentration or mass of a substance at any one time as measured by a grab sample. (25 Pa. Code § 92a.2)

Measured Flow means any method of liquid volume measurement, the accuracy of which has been previously demonstrated in engineering practice, or for which a relationship to absolute volume has been obtained.

Monthly Average Discharge Limitation means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month. (25 Pa. Code § 92a.2)

Municipal Waste means garbage, refuse, industrial lunchroom or office waste and other material, including solid, liquid, semisolid or contained gaseous material resulting from operation of residential, municipal, commercial or institutional establishments and from community activities; and sludge not meeting the definition of residual or hazardous waste under this section from a municipal, commercial or institutional water supply treatment plant, waste water treatment plant or air pollution control facility. (25 Pa. Code § 271.1)

Non-contact Cooling Water means water used to reduce temperature which does not come in direct contact with any raw material, intermediate product, waste product (other than heat), or finished product.

Residual Waste means garbage, refuse, other discarded material or other waste, including solid, liquid, semisolid or contained gaseous materials resulting from industrial, mining and agricultural operations and sludge from an industrial, mining or agricultural water supply treatment facility, wastewater treatment facility or air pollution control facility, if it is not hazardous. The term does not include coal refuse as defined in the Coal Refuse Disposal Control Act. The term does not include treatment sludges from coal mine drainage treatment plants, disposal of which is being carried on under and in compliance with a valid permit issued under the Clean Streams Law. (25 Pa Code § 287.1)

Severe Property Damage means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 CFR 122.41(m)(1)(ii))

Stormwater means the runoff from precipitation, snow melt runoff, and surface runoff and drainage. (25 Pa. Code § 92a.2)

Stormwater Associated With Industrial Activity means the discharge from any conveyance that is used for collecting and conveying stormwater and that is directly related to manufacturing, processing, or raw materials storage areas at an industrial plant, and as defined at 40 CFR 122.26(b)(14) (i) - (ix) & (xi) and 25 Pa. Code § 92a.2.

Total Dissolved Solids means the total dissolved (filterable) solids as determined by use of the method specified in 40 CFR Part 136.

Toxic Pollutant means those pollutants, or combinations of pollutants, including disease-causing agents, which after discharge and upon exposure, ingestion, inhalation or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains may, on the basis of information available to DEP cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions, including malfunctions in reproduction, or physical deformations in these organisms or their offspring. (25 Pa. Code § 92a.2)

III. SELF-MONITORING, REPORTING AND RECORDKEEPING

A. Representative Sampling

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity (40 CFR 122.41(j)(1)). Representative sampling includes the collection of samples, where possible, during periods of adverse weather, changes in treatment plant performance and changes in treatment plant loading. If possible, effluent samples must be collected where the effluent is well mixed near the center of the discharge conveyance and at the approximate mid-depth point, where the turbulence is at a maximum and the settlement of solids is minimized. (40 CFR 122.48, 25 Pa. Code § 92a.61)
2. Records Retention (40 CFR 122.41(j)(2))

Except for records of monitoring information required by this permit related to the permittee's sludge use and disposal activities which shall be retained for a period of at least 5 years, all records of monitoring activities and results (including all original strip chart recordings for continuous monitoring instrumentation and calibration and maintenance records), copies of all reports required by this permit, and records of all data used to complete the application for this permit shall be retained by the permittee for 3 years from the date of the sample measurement, report or application, unless a longer retention period is required by the permit. The 3-year period shall be extended as requested by DEP or the EPA Regional Administrator.

3. Recording of Results (40 CFR 122.41(j)(3))

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

- a. The exact place, date and time of sampling or measurements.
- b. The person(s) who performed the sampling or measurements.
- c. The date(s) the analyses were performed.
- d. The person(s) who performed the analyses.
- e. The analytical techniques or methods used; and the associated detection level.
- f. The results of such analyses.

4. Test Procedures

- a. Facilities that test or analyze environmental samples used to demonstrate compliance with this permit shall be in compliance with laboratory accreditation requirements of Act 90 of 2002 (27 Pa. C.S. §§ 4101-4113) and 25 Pa. Code Chapter 252, relating to environmental laboratory accreditation.
- b. Test procedures (methods) for the analysis of pollutants or pollutant parameters shall be those approved under 40 CFR Part 136 or required under 40 CFR Chapter I, Subchapters N or O, unless the method is specified in this permit or has been otherwise approved in writing by DEP. (40 CFR 122.41(j)(4), 122.44(i)(1)(iv))
- c. Test procedures (methods) for the analysis of pollutants or pollutant parameters shall be sufficiently sensitive. A method is sufficiently sensitive when 1) the method minimum level is at or below the level of the effluent limit established in the permit for the measured pollutant or pollutant parameter; or 2) the method has the lowest minimum level of the analytical methods approved under 40 CFR Part 136 or required under 40 CFR Chapter I, Subchapters N or O, for the measured pollutant or pollutant parameter; or 3) the method is specified in this permit or has been otherwise approved in writing by DEP for the measured pollutant or pollutant parameter. Permittees have the option of providing matrix or sample-specific minimum levels rather than the published levels. (40 CFR 122.44(i)(1)(iv))

5. Quality/Assurance/Control

In an effort to assure accurate self-monitoring analyses results:

- a. The permittee, or its designated laboratory, shall participate in the periodic scheduled quality assurance inspections conducted by DEP and EPA. (40 CFR 122.41(e), 122.41(i)(3))
- b. The permittee, or its designated laboratory, shall develop and implement a program to assure the quality and accurateness of the analyses performed to satisfy the requirements of this permit, in accordance with 40 CFR Part 136. (40 CFR 122.41(j)(4))

B. Reporting of Monitoring Results

1. The permittee shall effectively monitor the operation and efficiency of all wastewater treatment and control facilities, and the quantity and quality of the discharge(s) as specified in this permit. (25 Pa. Code §§ 92a.3(c), 92a.41(a), 92a.44, 92a.61(i) and 40 CFR §§ 122.41(e), 122.44(i)(1))
2. The permittee shall use DEP's electronic Discharge Monitoring Report (eDMR) system to report the results of compliance monitoring under this permit (see www.dep.pa.gov/edmr). Permittees that are not using the eDMR system as of the effective date of this permit shall submit the necessary registration and trading partner agreement forms to DEP's Bureau of Clean Water (BCW) within 30 days of the effective date of this permit and begin using the eDMR system when notified by DEP BCW to do so. (25 Pa. Code §§ 92a.3(c), 92a.41(a), 92a.61(g) and 40 CFR § 122.41(l)(4))
3. Submission of a physical (paper) copy of a Discharge Monitoring Report (DMR) is acceptable under the following circumstances:
 - a. For a permittee that is not yet using the eDMR system, the permittee shall submit a physical copy of a DMR to the DEP regional office that issued the permit during the interim period between the submission of registration and trading partner agreement forms to DEP and DEP's notification to begin using the eDMR system.
 - b. For any permittee, as a contingency a physical DMR may be mailed to the DEP regional office that issued the permit if there are technological malfunction(s) that prevent the successful submission of a DMR through the eDMR system. In such situations, the permittee shall submit the DMR through the eDMR system within 5 days following remedy of the malfunction(s).
4. DMRs must be completed in accordance with DEP's published DMR instructions (3800-FM-BCW0463). DMRs must be received by DEP no later than 28 days following the end of the monitoring period. DMRs are based on calendar reporting periods and must be received by DEP in accordance with the following schedule:
 - Monthly DMRs must be received within 28 days following the end of each calendar month.
 - Quarterly DMRs must be received within 28 days following the end of each calendar quarter, i.e., January 28, April 28, July 28, and October 28.
 - Semiannual DMRs must be received within 28 days following the end of each calendar semiannual period, i.e., January 28 and July 28.
 - Annual DMRs must be received by January 28, unless Part C of this permit requires otherwise.
5. The permittee shall complete all Supplemental Reporting forms (Supplemental DMRs) attached to this permit, or an approved equivalent, and submit the signed, completed forms as attachments to the DMR, through DEP's eDMR system. DEP's Supplemental Laboratory Accreditation Form (3800-FM-BCW0189) must be completed and submitted to DEP with the first DMR following issuance of this permit, and anytime thereafter when changes to laboratories or methods occur. (25 Pa. Code §§ 92a.3(c), 92a.41(a), 92a.61(g) and 40 CFR § 122.41(l)(4))
6. The completed DMR Form shall be signed and certified by either of the following applicable persons, as defined in 25 Pa. Code § 92a.22:

- For a corporation - by a principal executive officer of at least the level of vice president, or an authorized representative, if the representative is responsible for the overall operation of the facility from which the discharge described in the NPDES form originates.
- For a partnership or sole proprietorship - by a general partner or the proprietor, respectively.
- For a municipality, state, federal or other public agency - by a principal executive officer or ranking elected official.

If signed by a person other than the above and for co-permittees, written notification of delegation of DMR signatory authority must be submitted to DEP in advance of or along with the relevant DMR form. (40 CFR § 122.22(b))

7. If the permittee monitors any pollutant at monitoring points as designated by this permit, using analytical methods described in Part A III.A.4. herein, more frequently than the permit requires, the results of this monitoring shall be incorporated, as appropriate, into the calculations used to report self-monitoring data on the DMR. (40 CFR 122.41(l)(4)(ii))

C. Reporting Requirements

1. **Planned Changes to Physical Facilities** – The permittee shall give notice to DEP as soon as possible but no later than 30 days prior to planned physical alterations or additions to the permitted facility. A permit under 25 Pa. Code Chapter 91 may be required for these situations prior to implementing the planned changes. A permit application, or other written submission to DEP, can be used to satisfy the notification requirements of this section.

Notice is required when:

- a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b). (40 CFR 122.41(l)(1)(i))
 - b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are not subject to effluent limitations in this permit. (40 CFR 122.41(l)(1)(ii))
 - c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. (40 CFR 122.41(l)(1)(iii))
 - d. The planned change may result in noncompliance with permit requirements. (40 CFR 122.41(l)(2))
2. **Planned Changes to Waste Stream** – Under the authority of 25 Pa. Code § 92a.24(a), the permittee shall provide notice to DEP as soon as possible but no later than 45 days prior to any planned changes in the volume or pollutant concentration of its influent waste stream, as specified in paragraphs 2.a. and 2.b., below. Notice shall be provided on the "Planned Changes to Waste Stream" Supplemental Report (3800-FM-BCW0482), available on DEP's website. The permittee shall provide information on the quality and quantity of waste introduced into the facility, and any anticipated impact of the change on the quantity or quality of effluent to be discharged from the facility. The Report shall be sent via Certified Mail or other means to confirm DEP's receipt of the notification. DEP will determine if the submission of a new application and receipt of a new or amended permit is required.
- a. **Introduction of New Pollutants** (25 Pa. Code § 92a.24(a))

New pollutants are defined as parameters that meet all of the following criteria:

- (i) Were not detected in the facilities' influent waste stream as reported in the permit application; and

- (ii) Have not been approved to be included in the permittee's influent waste stream by DEP in writing.

The permittee shall provide notification of the introduction of new pollutants in accordance with paragraph 2 above. The permittee may not authorize the introduction of new pollutants until the permittee receives DEP's written approval.

b. Increased Loading of Approved Pollutants (25 Pa. Code § 92a.24(a))

Approved pollutants are defined as parameters that meet one or more of the following criteria:

- (i) Were detected in the facilities' influent waste stream as reported in the permittee's permit application; or
- (ii) Have been approved to be included in the permittee's influent waste stream by DEP in writing; or
- (iii) Have an effluent limitation or monitoring requirement in this permit.

The permittee shall provide notification of the introduction of increased influent loading (lbs/day) of approved pollutants in accordance with paragraph 2 above when (1) the cumulative increase in influent loading (lbs/day) exceeds 20% of the maximum loading reported in the permit application, or a loading previously approved by DEP, or (2) may cause an exceedance in the effluent of Effluent Limitation Guidelines (ELGs) or limitations in Part A of this permit, or (3) may cause interference or pass through at the facility (as defined at 40 CFR 403.3), or (4) may cause exceedances of the applicable water quality standards in the receiving stream. Unless specified otherwise in this permit, if DEP does not respond to the notification within 30 days of its receipt, the permittee may proceed with the increase in loading. The acceptance of increased loading of approved pollutants may not result in an exceedance of ELGs or effluent limitations and may not cause exceedances of the applicable water quality standards in the receiving stream.

3. Reporting Requirements for Hauled-In Wastes

a. Receipt of Residual Waste

- (i) The permittee shall document the receipt of all hauled-in residual wastes (including but not limited to wastewater from oil and gas wells, food processing waste, and landfill leachate), as defined at 25 Pa. Code § 287.1, that are received for processing at the treatment facility. The permittee shall report hauled-in residual wastes on a monthly basis to DEP on the "Hauled In Residual Wastes" Supplemental Report (3800-FM-BCW0450) as an attachment to the DMR. If no residual wastes were received during a month, submission of the Supplemental Report is not required.

The following information is required by the Supplemental Report. The information used to develop the Report shall be retained by the permittee for five years from the date of receipt and must be made available to DEP or EPA upon request.

- (1) The dates that residual wastes were received.
- (2) The volume (gallons) of wastes received.
- (3) The license plate number of the vehicle transporting the waste to the treatment facility.
- (4) The permit number(s) of the well(s) where residual wastes were generated, if applicable.
- (5) The name and address of the generator of the residual wastes.
- (6) The type of wastewater.

The transporter of residual waste must maintain these and other records as part of the daily operational record (25 Pa. Code § 299.219). If the transporter is unable to provide this information or the permittee has not otherwise received the information from the generator, the residual wastes shall not be accepted by the permittee until such time as the permittee receives such information from the transporter or generator.

- (ii) The following conditions apply to the characterization of residual wastes received by the permittee:
 - (1) If the generator is required to complete a chemical analysis of residual wastes in accordance with 25 Pa. Code § 287.51, the permittee must receive and maintain on file a chemical analysis of the residual wastes it receives. The chemical analysis must conform to the Bureau of Waste Management's Form 26R except as noted in paragraph (2), below. Each load of residual waste received must be covered by a chemical analysis if the generator is required to complete it.
 - (2) For wastewater generated from hydraulic fracturing operations ("frac wastewater") within the first 30 production days of a well site, the chemical analysis may be a general frac wastewater characterization approved by DEP. Thereafter, the chemical analysis must be waste-specific and be reported on the Form 26R.

b. Receipt of Municipal Waste

- (i) The permittee shall document the receipt of all hauled-in municipal wastes (including but not limited to septage and liquid sewage sludge), as defined at 25 Pa. Code § 271.1, that are received for processing at the treatment facility. The permittee shall report hauled-in municipal wastes on a monthly basis to DEP on the "Hauled In Municipal Wastes" Supplemental Report (3800-FM-BCW0437) as an attachment to the DMR. If no municipal wastes were received during a month, submission of the Supplemental Report is not required.

The following information is required by the Supplemental Report:

- (1) The dates that municipal wastes were received.
- (2) The volume (gallons) of wastes received.
- (3) The BOD₅ concentration (mg/l) and load (lbs) for the wastes received.
- (4) The location(s) where wastes were disposed of within the treatment facility.

- (ii) Sampling and analysis of hauled-in municipal wastes must be completed to characterize the organic strength of the wastes, unless composite sampling of influent wastewater is performed at a location downstream of the point of entry for the wastes.

4. Unanticipated Noncompliance or Potential Pollution Reporting

- a. Immediate Reporting - The permittee shall immediately report any incident causing or threatening pollution in accordance with the requirements of 25 Pa. Code §§ 91.33 and 92a.41(b).
 - (i) If, because of an accident, other activity or incident a toxic substance or another substance which would endanger users downstream from the discharge, or would otherwise result in pollution or create a danger of pollution or would damage property, the permittee shall immediately notify DEP by telephone of the location and nature of the danger. Oral notification to the Department is required as soon as possible, but no later than 4 hours after the permittee becomes aware of the incident causing or threatening pollution.

- (ii) If reasonably possible to do so, the permittee shall immediately notify downstream users of the waters of the Commonwealth to which the substance was discharged. Such notice shall include the location and nature of the danger.
 - (iii) The permittee shall immediately take or cause to be taken steps necessary to prevent injury to property and downstream users of the waters from pollution or a danger of pollution and, in addition, within 15 days from the incident, shall remove the residual substances contained thereon or therein from the ground and from the affected waters of this Commonwealth to the extent required by applicable law.
- b. The permittee shall report any noncompliance which may endanger health or the environment in accordance with the requirements of 40 CFR 122.41(l)(6). These requirements include the following obligations:
 - (i) 24 Hour Reporting - The permittee shall orally report any noncompliance with this permit which may endanger health or the environment within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which must be reported within 24 hours under this paragraph:
 - (1) Any unanticipated bypass which exceeds any effluent limitation in the permit;
 - (2) Any upset which exceeds any effluent limitation in the permit; and
 - (3) Violation of the maximum daily discharge limitation for any of the pollutants listed in the permit as being subject to the 24-hour reporting requirement. (40 CFR 122.44(g))
 - (ii) Written Report - A written submission shall also be provided within 5 days of the time the permittee becomes aware of any noncompliance which may endanger health or the environment. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
 - (iii) Waiver of Written Report - DEP may waive the written report on a case-by-case basis if the associated oral report has been received within 24 hours from the time the permittee becomes aware of the circumstances which may endanger health or the environment. Unless such a waiver is expressly granted by DEP, the permittee shall submit a written report in accordance with this paragraph. (40 CFR 122.41(l)(6)(iii))

5. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under paragraph C.4 of this section or specific requirements of compliance schedules, at the time DMRs are submitted, on the Non-Compliance Reporting Form (3800-FM-BCW0440). The reports shall contain the information listed in paragraph C.4.b.(ii) of this section. (40 CFR 122.41(l)(7))

- D. Specific Toxic Pollutant Notification Levels (for Manufacturing, Commercial, Mining, and Silvicultural Direct Dischargers) - The permittee shall notify DEP as soon as it knows or has reason to believe the following: (40 CFR 122.42(a))
- 1. That any activity has occurred, or will occur, which would result in the discharge of any toxic pollutant which is not limited in this permit, if that discharge on a routine or frequent basis will exceed the highest of the following "notification levels": (40 CFR 122.42(a)(1))
 - a. One hundred micrograms per liter.
 - b. Two hundred micrograms per liter for acrolein and acrylonitrile.

- c. Five hundred micrograms per liter for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol.
 - d. One milligram per liter for antimony.
 - e. Five times the maximum concentration value reported for that pollutant in this permit application.
 - f. Any other notification level established by DEP.
2. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following "notification levels": (40 CFR 122.42(a)(2))
- a. Five hundred micrograms per liter.
 - b. One milligram per liter for antimony.
 - d. Ten times the maximum concentration value reported for that pollutant in the permit application.
 - e. Any other notification level established by DEP.

E. Annual Fee (25 Pa. Code § 92a.62)

Permittees shall pay an annual fee in accordance with 25 Pa. Code § 92a.62. As of the effective date of this permit, the facility covered by the permit is classified in the **IW Stormwater Individual Permit** fee category, which has an annual fee of **\$1,500**.

Invoices for annual fees will be mailed to permittees approximately three months prior to the due date. In the event that an invoice is not received, the permittee is nonetheless responsible for payment. Permittees may contact the DEP at 717-787-6744 with questions related to annual fees. The fee identified above is subject to change if DEP publishes changes to 25 Pa. Code § 92a.62.

Payment for annual fees shall be remitted to DEP at the address below or through DEP's electronic payment system (www.depgreenport.state.pa.us/NPDESpay) by the due date specified on the invoice. Checks, if used for payment, should be made payable to the Commonwealth of Pennsylvania.

PA Department of Environmental Protection
Bureau of Clean Water
Re: Chapter 92a Annual Fee
P.O. Box 8466
Harrisburg, PA 17105-8466

PART B

I. MANAGEMENT REQUIREMENTS

A. Compliance

1. The permittee shall comply with all conditions of this permit. If a compliance schedule has been established in this permit, the permittee shall achieve compliance with the terms and conditions of this permit within the time frames specified in this permit. (40 CFR 122.41(a)(1))
2. The permittee shall submit reports of compliance or noncompliance, or progress reports as applicable, for any interim and final requirements contained in this permit. Such reports shall be submitted no later than 14 days following the applicable schedule date or compliance deadline. (25 Pa. Code § 92a.51(c), 40 CFR 122.47(a)(4))

B. Permit Modification, Termination, or Revocation and Reissuance

1. This permit may be modified, terminated, or revoked and reissued during its term in accordance with 25 Pa. Code § 92a.72 and 40 CFR 122.41(f).
2. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition. (40 CFR 122.41(f))
3. In the absence of DEP action to modify or revoke and reissue this permit, the permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time specified in the regulations that establish those standards or prohibitions. (40 CFR 122.41(a)(1))

C. Duty to Provide Information

1. The permittee shall furnish to DEP, within a reasonable time, any information which DEP may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. (40 CFR 122.41(h))
2. The permittee shall furnish to DEP, upon request, copies of records required to be kept by this permit. (40 CFR 122.41(h))
3. Other Information - Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to DEP, it shall promptly submit the correct and complete facts or information. (40 CFR 122.41(l)(8))

D. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes, but is not limited to, adequate laboratory controls including appropriate quality assurance procedures. This provision also includes the operation of backup or auxiliary facilities or similar systems that are installed by the permittee, only when necessary to achieve compliance with the terms and conditions of this permit. (40 CFR 122.41(e))

E. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge, sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment. (40 CFR 122.41(d))

F. Bypassing

1. Bypassing Not Exceeding Permit Limitations - The permittee may allow a bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions in paragraphs two, three and four of this section. (40 CFR 122.41(m)(2))
2. Other Bypassing - In all other situations, bypassing is prohibited and DEP may take enforcement action against the permittee for bypass unless:
 - a. A bypass is unavoidable to prevent loss of life, personal injury or "severe property damage." (40 CFR 122.41(m)(4)(i)(A))
 - b. There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance. (40 CFR 122.41(m)(4)(i)(B))
 - c. The permittee submitted the necessary notice required in F.4.a. and b. below. (40 CFR 122.41(m)(4)(i)(C))
3. DEP may approve an anticipated bypass, after considering its adverse effects, if DEP determines that it will meet the conditions listed in F.2. above. (40 CFR 122.41(m)(4)(ii))
4. Notice
 - a. Anticipated Bypass – If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least 10 days before the bypass. (40 CFR 122.41(m)(3)(i))
 - b. Unanticipated Bypass – The permittee shall submit oral notice of any other unanticipated bypass within 24 hours, regardless of whether the bypass may endanger health or the environment or whether the bypass exceeds effluent limitations. The notice shall be in accordance with Part A III.C.4.b.

G. Termination of Permit Coverage (25 Pa. Code § 92a.74 and 40 CFR 122.64)

1. Notice of Termination (NOT) – If the permittee plans to cease operations or will otherwise no longer require coverage under this permit, the permittee shall submit DEP's NPDES Notice of Termination (NOT) for Permits Issued Under Chapter 92a (3800-BCW-0410), signed in accordance with Part A III.B.6 of this permit, at least 30 days prior to cessation of operations or the date by which coverage is no longer required.
2. Where the permittee plans to cease operations, NOTs must be accompanied with an operation closure plan that identifies how tankage and equipment will be decommissioned and how pollutants will be managed, as applicable.
3. The permittee shall submit the NOT to the DEP regional office with jurisdiction over the county in which the facility is located.

II. PENALTIES AND LIABILITY

A. Violations of Permit Conditions

Any person violating Sections 301, 302, 306, 307, 308, 318 or 405 of the Clean Water Act or any permit condition or limitation implementing such sections in a permit issued under Section 402 of the Act is subject to civil, administrative and/or criminal penalties as set forth in 40 CFR 122.41(a)(2).

Any person or municipality, who violates any provision of this permit; any rule, regulation or order of DEP; or any condition or limitation of any permit issued pursuant to the Clean Streams Law, is subject to criminal and/or civil penalties as set forth in Sections 602, 603 and 605 of the Clean Streams Law.

B. Falsifying Information

Any person who does any of the following:

- Falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit, or
- Knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit (including monitoring reports or reports of compliance or noncompliance)

Shall, upon conviction, be punished by a fine and/or imprisonment as set forth in 18 Pa.C.S.A § 4904 and 40 CFR 122.41(j)(5) and (k)(2).

C. Liability

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance pursuant to Section 309 of the Clean Water Act or Sections 602, 603 or 605 of the Clean Streams Law.

Nothing in this permit shall be construed to preclude the institution of any legal action or to relieve the permittee from any responsibilities, liabilities or penalties to which the permittee is or may be subject to under the Clean Water Act and the Clean Streams Law.

D. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (40 CFR 122.41(c))

III. OTHER RESPONSIBILITIES

A. Right of Entry

Pursuant to Sections 5(b) and 305 of Pennsylvania's Clean Streams Law, and Title 25 Pa. Code Chapter 92a and 40 CFR 122.41(i), the permittee shall allow authorized representatives of DEP and EPA, upon the presentation of credentials and other documents as may be required by law:

1. To enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit; (40 CFR 122.41(i)(1))
2. To have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit; (40 CFR 122.41(i)(2))
3. To inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this permit; and (40 CFR 122.41(i)(3))
4. To sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act or the Clean Streams Law, any substances or parameters at any location. (40 CFR 122.41(i)(4))

B. Transfer of Permits

1. Transfers by modification. Except as provided in paragraph 2 of this section, a permit may be transferred by the permittee to a new owner or operator only if this permit has been modified or revoked and reissued, or a minor modification made to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act. (40 CFR 122.61(a))
2. Automatic transfers. As an alternative to transfers under paragraph 1 of this section, any NPDES permit may be automatically transferred to a new permittee if:
 - a. The current permittee notifies DEP at least 30 days in advance of the proposed transfer date in paragraph 2.b. of this section; (40 CFR 122.61(b)(1))
 - b. The notice includes the appropriate DEP transfer form signed by the existing and new permittees containing a specific date for transfer of permit responsibility, coverage and liability between them; (40 CFR 122.61(b)(2))
 - c. DEP does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue this permit, the transfer is effective on the date specified in the agreement mentioned in paragraph 2.b. of this section; and (40 CFR 122.61(b)(3))
 - d. The new permittee is in compliance with existing DEP issued permits, regulations, orders and schedules of compliance, or has demonstrated that any noncompliance with the existing permits has been resolved by an appropriate compliance action or by the terms and conditions of the permit (including compliance schedules set forth in the permit), consistent with 25 Pa. Code § 92a.51 (relating to schedules of compliance) and other appropriate DEP regulations. (25 Pa. Code § 92a.71)
3. In the event DEP does not approve transfer of this permit, the new owner or operator must submit a new permit application.

C. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege. (40 CFR 122.41(g))

D. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for a new permit. (40 CFR 122.41(b))

E. Other Laws

The issuance of this permit does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations.

PART C

I. OTHER REQUIREMENTS

- A. The approval herein given is specifically made contingent upon the permittee acquiring all necessary property rights by easement or otherwise, providing for the satisfactory construction, operation, maintenance or replacement of all structures associated with the herein approved discharge in, along, or across private property, with full rights of ingress, egress and regress.
- B. Collected screenings, slurries, sludges, and other solids shall be handled, recycled and/or disposed of in compliance with the Solid Waste Management Act (35 P.S. §§ 6018.101 – 6018.1003), 25 Pa. Code Chapters 287, 288, 289, 291, 295, 297, and 299 (relating to requirements for landfilling, impoundments, land application, composting, processing, and storage of residual waste), Chapters 261a, 262a, 263a, and 270a (related to identification of hazardous waste, requirements for generators and transporters, and hazardous waste, requirements for generators and transporters, and hazardous waste permit programs), federal regulation 40 CFR Part 257, The Clean Streams Law, and the Federal Clean Water Act and its amendments. Screenings collected at intake structures shall be collected and managed and not be returned to the receiving waters.

The permittee is responsible to obtain or assure that contracted agents have all necessary permits and approvals for the handling, storage, transport and disposal of solid waste materials generated as a result of wastewater treatment.

- C. The terms and conditions of Water Quality Management (WQM) permits that may have been issued to the permittee relating to discharge requirements are superseded by this NPDES permit unless otherwise stated herein.
- D. If the applicable standard or effluent guideline limitation relating to the application for Best Available Technology (BAT) Economically Achievable or to Best Conventional Technology (BCT) is developed by DEP or EPA for this type of industry, and if such standard or limitation is more stringent than the corresponding limitations of this permit (or if it controls pollutants not covered by this permit), DEP may modify or revoke and reissue the permit to conform with that standard or limitation.
- E. The permittee shall optimize chlorine dosages used for disinfection or other purposes to minimize the concentration of Total Residual Chlorine (TRC) in the effluent, meet applicable effluent limitations, and reduce the possibility of adversely affecting the receiving waters. Optimization efforts may include an evaluation of wastewater characteristics, mixing characteristics, and contact times, adjustments to process controls, and maintenance of the disinfection facilities. If DEP determines that effluent TRC is causing adverse water quality impacts, DEP may reopen this permit to apply new or more stringent effluent limitations and/or require implementation of control measures or operational practices to eliminate such impacts.

Where the permittee does not use chlorine for primary or backup disinfection, but proposes the use of chlorine for cleaning or other purposes, the permittee shall notify DEP prior to initiating use of chlorine and monitor TRC concentrations in the effluent on each day in which chlorine is used. The results shall be submitted as an attachment to the DMR.

- F. The permittee shall develop a treatment facility operations and maintenance (O&M) plan addressing key wastewater processes. The plan shall be reviewed annually and updated when appropriate. The plan shall be submitted to DEP for review upon request. For the purpose of this paragraph, a key wastewater process includes any equipment or process that, if it fails, may cause the discharge of raw wastewater or wastewater that fails to meet NPDES permit discharge requirements, or a failure that may threaten human or environmental health. The O&M plan shall include the following, at a minimum:
1. A process control strategy that includes a schedule for process control sampling, monitoring, testing, and recordkeeping.

2. A plan that identifies how key wastewater processes shall be monitored and adjusted while the facility is staffed.
 3. A plan that identifies how key wastewater processes will be monitored while the treatment facility is not staffed.
 4. For treatment plants that are impacted by wet weather flows, the permittee shall develop and implement a wet weather operations strategy that minimizes or eliminates the wash out of solids from the treatment system while maximizing the flow through the treatment plant.
 5. An emergency plan that identifies how the facility will be operated during times of emergency. For example, the plan shall detail how key wastewater processes will be repaired or replaced in the event of a failure while minimizing loss of life and property damage to the facility. This plan shall also include emergency contact numbers for local emergency response agencies, plant personnel, critical suppliers and vendors, and DEP contacts, at a minimum.
 6. A preventative maintenance plan that includes a schedule for preventative maintenance for all equipment within the treatment system. A spare parts inventory shall be included as part of this plan.
 7. A solids management plan that identifies how solids produced by the facility will be wasted, treated, and ultimately disposed of.
- G. Monitoring of Total Residual Chlorine (TRC) and Total Halomethanes (THMs) shall be required during periods when chlorine is used for disinfection. When a weekly Fecal Coliform sample result exceeds #150/100 ml, chlorination shall be used. Daily monitoring for TRC and 2/Month sampling for THMs shall commence and continue until two consecutive prechlorination Fecal Coliform sample results below #150/100 ml are obtained. A detail log regarding use of chlorine shall be maintained and submitted with monthly DMR
- H. The effluent limit for Total Trihalomethanes shall be a total of the following parameters:
- Chlorodibromomethane
Dichlorobromomethane
- I. Four grab samples shall be collected during actual hours of discharge over a 24-hour period and need not be flow proportioned. The four samples will be combined at the laboratory immediately before analysis. Only one analysis is required, not four.
- J. The plant shall remove 100 percent of the pollutant loading attributable to nonhazardous waste waters and sludges that are imported directly into the wastewater treatment plant from sources that are outside of the DRBC. The applicant shall remove 100 percent of the pollutant loading of such wastes, that are imported directly into the wastewater treatment plant, from in-Basin sources which have been removed by treatment processes regulated by discharge permits. All sampling of raw loading to determine compliance with required treatment plant reduction, must be done at times when no trucked-in wastes are being discharged to the treatment plant.
- K. Waste Management of Fairless (WMF) shall maintain and make available to DRBC upon request, appropriate records of such nonhazardous waste waters and sludges. Records shall include the sources, volumes, and characteristics of the wastes as well as, the dates such materials are received and treated.

II. WHOLE EFFLUENT TOXICITY (WET)

A. General Requirements

1. The permittee shall conduct Chronic and Acute WET tests as specified in this section. The permittee shall collect discharge samples and perform WET tests to generate chronic survival and reproduction data for the cladoceran, *Ceriodaphnia dubia* and chronic survival and growth data for the fathead

minnow, *Pimephales promelas*. The permittee shall also collect discharge samples and perform WET tests to generate Acute survival data for the cladoceran, *Ceriodaphnia dubia*.

2. Samples shall be collected at Outfall 005 in accordance with paragraph E.
3. The permittee shall perform testing using the following dilution series: 1%, 2%, 30%, 60%, and 100% effluent, with a control, where 1% is the facility-specific Target In-Stream Waste Concentration (TIWC).
4. The determination of whether a test endpoint passes or fails shall be made using DEP's WET Analysis Spreadsheet (available at www.dep.pa.gov/wett) by comparing replicate data for the control with replicate data for the TIWC dilution or any dilution greater than the TIWC.
5. The permittee shall submit only valid WET test results to DEP.

B. Test Frequency and Reporting

1. WET testing shall be conducted quarterly, beginning within 30 days of the permit effective date. Tests shall be completed within calendar quarters, i.e., one test each during the periods of January 1 – March 31, April 1 – June 30, July 1 – September 30, and October 1 – December 31. A complete WET test report shall be submitted to the DEP regional office that issued the permit within 45 days of test completion. A complete WET test report submission shall include the information contained in paragraph H, below.
2. If a test failure is determined for any endpoint during quarterly monitoring, the permittee shall initiate a re-test for the species with the failure, at a minimum, within 45 days of test completion. All endpoints for the species shall be evaluated in the re-test. The results of the re-test shall be submitted to the DEP regional office that issued the permit.
3. If a passing result is determined for all endpoints in a re-test, the permittee continue with quarterly monitoring, as applicable.
4. If there is a failure for one or more endpoints in a re-test, the permittee shall initiate or continue quarterly WET testing for both species until there are four consecutive passing results for all endpoints. The results of all tests shall be submitted to the DEP regional office that issued the permit. In addition, the permittee shall initiate a Phase I Toxicity Reduction Evaluation (TRE) as specified in paragraph C, below.
5. The permittee must report the results of each test endpoint that has a WET limit in Part A of this permit on the Discharge Monitoring Report (DMR). Test results shall be reported on the DMR in terms of acute or chronic Toxicity Units (TU_a or TU_c), where TU_a is used for acute tests and TU_c is used for chronic tests. If DEP's WET Analysis Spreadsheet indicates a passing result for an endpoint, report the value obtained from the expression "1/TIWC", which is equivalent to the permit limit. If the Spreadsheet indicates a failure, report the value obtained from the expression "> 1/TIWC". If a dilution higher than the TIWC dilution is used for the comparison with the control, report the value obtained from the expression "1/dilution". For example, an acute test endpoint failure at a TIWC dilution of 50% would be reported as "> 2.0 TU_a" (1/0.5).
6. The permittee shall attach the WET Analysis Spreadsheet for the latest four consecutive WET tests to the NPDES permit renewal application that is submitted to DEP at least 180 days prior to the permit expiration date.

C. Phase I Toxicity Reduction Evaluation (TRE)

1. The Phase I TRE trigger is one WET endpoint failure followed by a re-test that confirms the failure for the same species. When the TRE process is triggered, quarterly WET testing shall be initiated for both species until there are four consecutive passing results for all endpoints. The Phase I TRE may include a Toxicity Identification Evaluation (TIE) if the permittee cannot immediately identify the possible causes of the effluent toxicity and the possible sources of the causative agents.

2. The permittee shall, within one year following the Phase I TRE trigger, submit a Phase I TRE report to the DEP regional office that issued the permit. The Phase I TRE shall be conducted in accordance with EPA's guidance, "Toxicity Reduction Evaluation for Municipal Wastewater Treatment Plants" (EPA/833B-99/002), "Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations" (EPA/600/2-88/070), and other relevant EPA guidance, as applicable. If a TIE is conducted as part of the Phase I TRE, it shall conform to EPA's guidance, "Methods for Aquatic Toxicity Identification Evaluations Phase I" (EPA/600/6-91/003), "Phase II" (EPA/600/R-92/080), "Phase III" (EPA/600/R-92/081) and other relevant EPA guidance. The Phase I TRE report shall be submitted with the fourth quarterly WET test report that is completed following the Phase I TRE trigger. The TRE shall include all activities undertaken to identify the cause(s) and source(s) of toxicity and any control efforts.
3. If all four quarterly WET tests produce passing results for all endpoints during the Phase I TRE process, performance of a Phase II TRE is not required, and annual WET testing in accordance with paragraph B.1 may resume.
4. If the four WET tests produce at least one failing result during the Phase I TRE process, the permittee shall continue quarterly WETT monitoring for both species and initiate a Phase II TRE in accordance with paragraph D. In this case, the Phase I TRE must include a schedule for completion of the Phase II TRE. The schedule must include interim milestones and a final completion date not to exceed two years from the initiation of the Phase II TRE. The permittee shall implement the Phase II TRE in accordance with the schedule unless DEP issues written approval to modify the schedule or cease performance of the Phase II TRE.
5. Re-tests during the TRE process are required for invalid tests but are optional and at the discretion of the permittee for valid tests. The results of all re-tests must be submitted to the DEP regional office that issued the permit along with the required elements in paragraph H.

D. Phase II Toxicity Reduction Evaluation (TRE)

1. The Phase II TRE trigger is one WET endpoint failure during performance of the Phase I TRE. A Phase II TRE, if required, shall conform to EPA's guidance, "Toxicity Reduction Evaluation for Municipal Wastewater Treatment Plants" (EPA/833B-99/002), "Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations" (EPA/600/2-88/070), and other relevant EPA guidance, as applicable. A Phase II TRE evaluates the possible control options to reduce or eliminate the effluent toxicity and the implementation of controls.
2. Once initiated, the Phase II TRE must continue until the source(s) of toxicity are controlled as evidenced by four consecutive WET test passing results for all endpoints, and a final TRE report must be submitted on or before the date specified in the schedule, unless otherwise approved by DEP in writing.

E. Sample Collection

For each acute testing event, a 24-hour flow-proportioned composite sample shall be collected. For each chronic testing event, three 24-hour flow-proportioned, composite samples shall be collected over a seven day exposure period. The samples must be collected at a frequency of not greater than every two hours and must be flow-proportioned. The samples must be collected at the permit compliance sampling location. Samples must be analyzed within 36 hours from the end of the compositing period and must be placed on ice and held at $\leq 6^{\circ}\text{C}$. Refer to the sample handling and preservation regulations set forth in 40 CFR 136, 25 Pa. Code Chapter 252, The NELAC Institute (TNI) Standard, and the appropriate EPA methods.

F. Test Conditions and Methods

Laboratories must be accredited by the DEP Laboratory Accreditation Program in order to perform and report WET tests for NPDES permit compliance. Laboratories must be either State or NELAP accredited.

1. Acute tests shall be completed in accordance with EPA's "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms" (EPA-821-R-02-012, latest edition). Forty eight (48) hour static non-renewal tests shall be used.

2. Chronic tests shall be completed in accordance with EPA's "Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms" (EPA-821-R-02-013, latest edition). Seven (7) day tests shall be used with renewal every 24 hours.
3. The quality assurance and control (QA/QC) requirements and test acceptability standards specified in EPA's test methods and the requirements set forth in 25 Pa Code Chapter 252 or the TNI Standard must be followed.
4. If the permittee or its accredited laboratory determines that QA/QC requirements and/or test acceptability standards have not been met, a re-test shall be initiated within 45 days. Original test data must be maintained by the laboratory and be submitted to DEP upon request. The justification for a re-test must be clearly documented and kept on file with the sample results.

G. Chemical Analyses

Chemical analyses must follow the requirements of the EPA methods and applicable State and/or Federal regulations.

1. Chemical analysis on effluent samples shall include pH, Conductivity, Total Alkalinity, Total Hardness, Total Residual Chlorine, Total Ammonia (Unionized Ammonia), Dissolved Oxygen and temperature. Chemical analyses as described in the EPA Methods (above) shall be performed for each sampling event, including each new batch of dilution water and each testing event.
2. In addition to the chemical analyses required above, those parameters listed in Part A of the NPDES permit for the outfall(s) tested shall be analyzed concurrently with the WET test by using the method(s) specified in the permit.

H. WET Report Elements

WET test reports that are submitted to DEP must include the requirements identified in 25 Pa. Code § 252.401(j)(1) – (15) or in the TNI Standard, or equivalent, as well as the following information:

1. A general test description, including the origin and age of test organisms, dates and results of reference toxicant tests, light and temperature regimes, and other documentation that QA and test acceptability criteria as specified in EPA's methods and DEP's QA Summaries have been met.
2. A description of sample collection procedures and sampling location.
3. Name(s) of individual(s) collecting and transporting samples, including sample renewals, and the date(s) and time(s) of sample collection.
4. All chemical and physical data including laboratory quantitation limits and observations made on the species. The hardness shall be reported for each test condition.
5. Copies of raw data sheets and/or bench sheets with data entries and signatures.
6. When effluents are dechlorinated, dechlorination procedures must be described and if applicable a thiosulfate control used in addition to the normal dilution water control. If the thiosulfate control results are significantly different from the normal control, as determined using DEP's WET Analysis Spreadsheet, the thiosulfate control shall be used in the spreadsheet for comparison with the TIWC condition. The WET report must specify which control was used to determine whether the test result is pass or fail.
7. A description of all observations or test conditions that may have affected the test outcome.
8. Control charts for the species tested regarding age, temperature test range, mortality data and all reference toxicant tests.

9. A completed WET test summary report (3800-FM-BCW0485).
10. A DEP WET Analysis Spreadsheet printout that provides control and TIWC replicate data and displays the outcome of the test (pass or fail) for each endpoint tested.

WETT reports shall be submitted to the DEP regional office that issued the permit and, for discharges to the Delaware River basin, the Delaware River Basin Commission (DRBC).

III. REQUIREMENTS APPLICABLE TO STORMWATER OUTFALLS

- A. The permittee is authorized to discharge non-polluting stormwater from its site, alone or in combination with other wastewaters, through the following outfalls: 001, 002, 003, 006, 007 and 009

Monitoring requirements and effluent limitations for these outfalls are specified in Part A of this permit, if applicable.

- B. Stormwater Annual Report.

The permittee shall submit a complete Annual Report to the DEP office that issued the permit by May 1 each year using DEP's Annual Report template, attached to this permit. The Annual Report shall address activities under the permit for the previous calendar year. The permittee shall submit the Annual Report electronically if notified by DEP in writing. If the permittee discharges to a municipal separate storm sewer system (MS4), a copy of the Annual Report shall be submitted to the operator of the MS4.

- C. Best Management Practices (BMPs).

The permittee shall implement and, as necessary, maintain the following BMPs to remain in compliance with this permit.

1. Pollution Prevention and Exposure Minimization.

The permittee shall minimize the exposure of manufacturing, processing, and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations) to rain, snow, snowmelt, and runoff in order to minimize pollutant discharges by either locating industrial materials and activities inside or protecting them with storm resistant coverings wherever feasible. The permittee shall implement and maintain the following measures, at a minimum:

- a. Use grading, berming or curbing to prevent runoff of polluted stormwater and divert run-on away from areas that contain polluted stormwater
- b. Locate materials, equipment, and activities so that potential leaks and spills are contained or able to be contained or diverted before discharge to surface waters
- c. Clean up spills and leaks promptly using dry methods (e.g., absorbents) to prevent the discharge of pollutants to surface waters
- d. Store leaky vehicles and equipment indoors or, if stored outdoors, use drip pans and absorbents to prevent the release of pollutants to the environment.
- e. Use spill/overflow protection equipment.
- f. Perform all vehicle and/or equipment cleaning operations indoors, under cover, or in bermed areas that prevent runoff and run-on and also that capture any overspray.
- g. Drain fluids from equipment and vehicles that will be decommissioned, and, for any equipment and vehicles that will remain unused for extended periods of time, inspect at least monthly for leaks.

- h. Keep all dumpster lids closed when not in use. For dumpsters and roll off boxes that do not have lids, ensure that discharges have a control (e.g., secondary containment, treatment). This General Permit does not authorize dry weather discharges from dumpsters or roll off boxes.
 - i. Minimize contamination of stormwater runoff from fueling areas by implementing the following BMPs where determined to be feasible: cover fueling areas; install oil/water separators or oil and grease traps in fueling area storm drains; use berms to prevent run-on to and runoff from fueling areas; use spill/overflow protection and cleanup equipment; use dry cleanup methods; and/or treat and/or recycle collected stormwater runoff.
 - j. Train employees routinely (no less than annually) on pollution prevention practices as contained in the PPC Plan.
- 2. Good Housekeeping.

The permittee shall perform good housekeeping measures in order to minimize pollutant discharges including the routine implementation of the following measures, at a minimum:

 - a. Implement a routine cleaning and maintenance program for all impervious areas of the facility where particulate matter, dust or debris may accumulate to minimize the discharge of pollutants in stormwater. The cleaning and maintenance program must encompass, as appropriate, areas where material loading and unloading, storage, handling and processing occur.
 - b. Store materials in appropriate containers.
 - c. Minimize the potential for waste, garbage and floatable debris to be discharged by keeping exposed areas free of such materials, or by intercepting them before they are discharged.
 - d. Eliminate floor drain connections to storm sewers.
 - e. Use drip pans, drain boards, and drying racks to direct drips back into a fluid holding tank for reuse. Drain fluids from all equipment and parts prior to disposal. Promptly transfer used fluids to the proper container; do not leave full drip pans or other open containers around the shop. Empty and clean drip pans and containers.
 - f. Label and track the recycling of waste material (e.g., used oil, spent solvents, batteries).
 - g. Prohibit the practice of hosing down an area where the practice would result in the discharge of pollutants to a municipal or other storm water collection system that conveys pollutants off-site without proper treatment.
- 3. Erosion and Sediment Controls.
 - a. The permittee shall minimize erosion and pollutant discharges by stabilizing exposed soils and placing flow velocity dissipation devices at discharge locations to minimize channel and stream bank erosion and scour in the immediate vicinity of stormwater outfalls.
 - b. The permittee shall conduct all earth disturbance activities and, when applicable, shall maintain all post-construction stormwater management (PCSM) BMPs in accordance with 25 Pa. Code Chapter 102.
 - c. The permittee may not utilize polymers or other chemicals to treat stormwater unless written permission is obtained from DEP.
- 4. Spill Prevention and Responses.

The permittee shall minimize the potential for leaks, spills and other releases that may be exposed to stormwater and develop a PPC Plan for effective responses to such releases. The permittee shall conduct the following spill prevention and response measures, at a minimum:

- a. Maintain an organized inventory of materials on-site. Plainly label containers (e.g., "Used Oil," "Spent Solvents," "Fertilizers and Pesticides") that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur.
- b. Implement procedures for material storage and handling, including the use of secondary containment and barriers between material storage and traffic areas, or a similarly effective means designed to prevent the discharge of pollutants from these areas.
- c. Develop and implement employee and contractor training on the procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases. The permittee shall conduct periodic training, no less than annually, and document the training on the Annual Report specified in paragraph B of this section.
- d. Keep spill kits on-site, located near areas where spills may occur or where a rapid response can be made.
- e. Notify appropriate facility personnel when a leak, spill, or other release occurs.
- f. To the extent possible, eliminate or reduce the number and amount of hazardous materials and waste by substituting non-hazardous or less hazardous materials of equal function, as determined by the permittee.
- g. Clean up leaks, drips, and other spills without using large amounts of water or liquid cleaners. Use absorbents for dry cleanup whenever possible.

When a leak, spill or other release occurs during a 24-hour period that contains a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under 40 CFR Parts 110, 117 or 302, the permittee shall, in addition to the notification requirements contained in Part A III.C.4 of this permit, notify the National Response Center (NRC) at (800) 424-8802 in accordance with the requirements of 40 CFR Parts 110, 117, and 302 as soon as the permittee becomes aware of the discharge.

Sector- and Site-Specific BMPs.

1. The permittee shall implement a preventive maintenance program and shall maintain all elements of leachate collection and treatment systems, to prevent commingling of leachate with stormwater, and the integrity and effectiveness of any intermediate or final cover (including repairing the cover as necessary), to minimize the effects of settlement, sinking, and erosion.
2. Provide temporary stabilization (e.g., temporary seeding, mulching, and placing geotextiles on the inactive portions of stockpiles) for the following in order to minimize discharges of pollutants in stormwater: materials stockpiled for daily, intermediate, and final cover; inactive areas of the landfill; landfills with final covers but where vegetation has yet to establish itself; and land application sites where waste application has been completed but final vegetation has not yet been established.

D. Routine Inspections.

1. The permittee shall visually inspect the following areas and BMPs on a semiannual basis (calendar periods), at a minimum:
 - a. Areas where industrial materials or activities are exposed to stormwater.
 - b. Areas identified in the PPC Plan as potential pollutant sources.

- c. Areas where spills or leaks have occurred in the past three years.
- d. Stormwater outfalls and locations where authorized non-stormwater discharges may commingle.
- e. Physical BMPs used to comply with this permit.

At least once each calendar year, the routine inspection must be conducted during a period when a stormwater discharge is occurring.

- 2. The permittee shall evaluate and document the following conditions, at a minimum, in the Annual Report required by paragraph B of this section through required inspections:
 - k. Raw materials, products or wastes that may have or could come into contact with stormwater.
 - l. Leaks or spills from equipment, drums, tanks and other containers.
 - m. Off-site tracking of industrial or waste materials, or sediment where vehicles enter or exit the site.
 - n. Tracking or blowing of raw, final or waste materials from areas of no exposure to exposed areas.
 - o. Control measures or BMPs needing replacement, maintenance or repair.
 - p. The presence of authorized non-stormwater discharges that were not identified in the permit application and non-stormwater discharges not authorized by this permit.

E. Preparedness, Prevention and Contingency (PPC) Plan

- 1. The permittee shall develop and implement a PPC Plan in accordance with 25 Pa. Code § 91.34 following the guidance contained in DEP's "Guidelines for the Development and Implementation of Environmental Emergency Response Plans" (DEP ID 400-2200-001), its NPDES-specific addendum and the minimum requirements below.
 - a. The PPC Plan must identify all potential sources of pollutants that may reasonably be expected to affect the quality of stormwater discharges from the facility.
 - b. The PPC Plan must describe preventative measures and BMPs that will be implemented to reduce or eliminate pollutants from coming into contact with stormwater resulting from routine site activities and spills.
 - c. The PPC Plan must address actions that will be taken in response to on-site spills or other pollution incidents.
 - d. The PPC Plan must identify areas which, due to topography or other factors, have a high potential for soil erosion, and identify measures to limit erosion. Where necessary, erosion and sediment control measures must be developed and implemented in accordance with 25 Pa. Code Chapter 102 and DEP's "Erosion and Sediment Pollution Control Manual" (DEP ID 363-2134-008).
 - e. The PPC Plan must address security measures to prevent accidental or intentional entry which could result in an unintentional discharge of pollutants.
 - f. The PPC Plan must include a plan for training employees and contractors on pollution prevention, BMPs, and emergency response measures. This training must be conducted in accordance with paragraph C.4.c of this section.
 - g. If the facility is subject to SARA Title III, Section 313, the PPC Plan must identify releases of "Water Priority Chemicals" within the previous three years. Water Priority Chemicals are those identified in EPA's "Guidance for the Determination of Appropriate Methods for the Detection of Section 313

Water Priority Chemicals" (EPA 833-B-94-001, April 1994). The Plan must include an evaluation of all activities that may result in the stormwater discharge of Water Priority Chemicals.

- h. Spill Prevention Control and Countermeasure (SPCC) plans may be used to meet the requirements of this section if the minimum requirements are addressed.
2. The permittee shall review and if necessary update the PPC Plan on an annual basis, at a minimum, and when one or more of the following occur:
 - a. Applicable DEP or federal regulations are revised, or this permit is revised.
 - b. The PPC Plan fails in an emergency.
 - c. The facility's design, industrial process, operation, maintenance, or other circumstances change in a manner that materially increases the potential for fires, explosions or releases of toxic or hazardous constituents; or which changes the response necessary in an emergency.
 - d. The list of emergency coordinators or equipment changes.
 - e. When notified in writing by DEP.

The permittee shall maintain all PPC Plan updates on-site, make the updates available to DEP upon request, and document the updates in Annual Reports.

F. Stormwater Monitoring Requirements.

1. The permittee shall conduct monitoring of its stormwater discharges at the representative outfalls identified in Part A of this permit, if applicable. The permittee shall document stormwater sampling event information and no exposure conditions for each calendar year on the Annual Report required by paragraph B of this section.
2. The permittee shall, upon written notice from DEP, install inlets, pipes, and/or other structures or devices that are considered necessary in order to conduct representative stormwater sampling, in accordance with a schedule provided by DEP.
3. The permittee shall collect all samples from discharges resulting from a storm event that is greater than 0.1 inch in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The 72-hour storm interval is waived when the preceding storm did not yield a measurable discharge, or if the permittee is able to document that a less than 72-hour interval is representative for local storm events during the sample period.
4. The permittee shall collect all grab samples within the first 30 minutes of a discharge, unless the permittee determines that this is not possible, in which case grab samples must be collected as soon as possible after the first 30 minutes of a discharge. The permittee shall explain why samples could not be collected within the first 30 minutes of any discharge on the Annual Report required by paragraph B of this section.
5. The permittee shall collect stormwater samples at times when commingling with non-stormwater discharges is not occurring or at locations prior to the commingling of non-stormwater discharges, unless Part A of this permit recognizes commingling of stormwater and non-stormwater discharges.
6. In the event that stormwater discharge concentrations for a parameter exceeds the benchmark values identified below at the same outfall for two or more consecutive monitoring periods, the permittee shall develop a corrective action plan to reduce the concentrations of the parameters in stormwater discharges. The permittee shall submit the corrective action plan to DEP within 90 days of the end of the monitoring period triggering the need for the plan, and shall implement the plan immediately upon submission or at a later time if authorized by DEP in writing. The permittee shall, in developing the plan, evaluate alternatives to reduce stormwater concentrations and select one or more BMPs or control

measures for implementation, unless the permittee can demonstrate in the plan that (1) the exceedances are solely attributable to natural background sources; (2) no further pollutant reductions are technologically available and economically practicable and achievable in light of best industry practice; or (3) further pollutant reductions are not necessary to prevent stormwater discharges from causing or contributing to an exceedance of applicable water quality standards.

Parameter	Benchmark Value (mg/L)
Total Suspended Solids	100
Chemical Oxygen Demand	120
pH (S.U.)	6.0 – 9.0
Color (Pt-Co Units)	500
Total Dissolved Solids	1000
Ammonia	5.0
Oil and Grease	15.0
Total Tritium (pCi/L)	1000

IV. PCB POLLUTANT MINIMIZATION PLAN AND MONITORING

- A. On December 15, 2003, the U.S. Environmental Protection Agency (EPA), Regions 2 and 3, adopted a Total Maximum Daily Load (TMDL) for Polychlorinated Biphenyls (PCBs) for Zones 2, 3, 4, and 5 of the tidal Delaware River. The TMDLs require the facilities identified as discharging PCBs to these zones of the Delaware River or to the tidal portions of tributaries to these zones to conduct monitoring for 209 PCB congeners, and prepare and implement a PCB Pollutant Minimization Plan (PMP). Subsequent monitoring required by DRBC in 2005 confirmed the presence of PCBs, and indicates that this facility does contribute to 99 percent of the cumulative loadings from all point sources.
- B. The permittee shall collect two 24-hour composite samples annually during a dry weather flow. The samples shall be collected from Outfall(s) 005.
- C. All sample analyses shall be performed using EPA Method 1668A, Revision A: Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by HRGC/HRMS (EPA-821-R-00-002, December 1999) as supplemented or amended, and results for all 209 PCB congeners shall be reported. Project-specific sample collection protocols, analytical procedures, and reporting requirements of the Delaware River Basin Commission (DRBC) shall be followed (see www.state.nj.us/drbc/quality/toxics/pcb-monitoring.html). Monitoring information, sample data, and reports associated with PCB monitoring shall be submitted to DEP and DRBC in the form of two compact discs in the format referenced at www.nj.gov/drbc/library/documents/PCB-EDD011309.pdf.

In accordance with the EPA Regions 2 and 3 TMDLs for PCBs for Zones 2–5 of the Tidal Delaware River, the permittee submitted a PMP for PCBs to the DRBC on June 6, 2006. The permittee shall continue to comply with the requirements of Section 4.30.9 of DRBC's Water Quality Regulations. Therefore, the permittee shall:

1. Continue to implement the PMP to achieve PCB loading reduction goals.
2. Submit an Annual Report on the yearly anniversary of the commencement of the PMP to DRBC and DEP consistent with the guidance specified at www.nj.gov/drbc/programs/quality/pmp.html.

The PMP Annual Report and PCB data shall be submitted to DEP and DRBC at the following addresses:

PA Department of Environmental Protection
Southeast Regional Office
Clean Water Program
2 East Main Street
Norristown, PA 19401

Delaware River Basin Commission
Modeling, Monitoring & Assessment Branch
P.O. Box 7360
West Trenton, NJ 08628

V. LANDFILL LEACHATE DISCHARGE

A. Monitoring of Leachate Quantity and Quality

Upon commencement of leachate flow from the facility, the operator shall sample and analyze the leachate as required by the Waste Management Program. Copies of the quarterly report shall be submitted to the Water Management and Waste Management Programs in the Southcentral Regional Office. The reports shall be submitted no later than 28 days after the end of each calendar quarter.

B. Restrictions upon Commencement of New or Expanded Discharge

Discharge of leachate from any new or expanded landfill operation is prohibited until the following conditions are met:

1. All quarterly leachate sampling data required by Waste Management has been submitted to DEP for review.
2. An operating treatment system has been installed capable of meeting the effluent limitations in Part A of this permit, and a Part II Water Management Permit has been issued for the treatment system.

C. Control of Stormwater Runoff

In addition to the requirements contained in this permit, the stormwater runoff from the permittee's landfill operation shall be controlled in accordance with the Waste Management Permit issued to the permittee.

D. Discharge from Groundwater Underdrain Systems

The permittee shall monitor underdrain system discharges in accordance with the Waste Management Permit issued to the permittee. Remedial measures necessary as a result of such monitoring will be taken as required by the Department.

E. Monitoring of Groundwater Quality and Quantity

Groundwater monitoring, assessment, and abatement shall be in accordance with the Waste Management Permit issued to the permittee.

VI. Fecal Coliform Monitoring

The seasonal effluent limitations for fecal coliform are based on Chapter 92a (§ 92a.47(4) & (5)) of DEP's regulations and Delaware River Basin Commission's (DRBC's) Water Quality Regulations at § 4.30.4.A. DEP's regulations govern the summer limits for fecal coliform while the winter limits are based on DRBC's regulations. The DRBC regulations state that during winter season from October through April, the instantaneous maximum concentration of fecal coliform organisms shall not be greater than 1,000 per 100 milliliters in more than 10 percent of the samples tested. For reporting purposes, a copy of the guidelines on the 10 percent rule is enclosed with the permit.

VII. WQBELs BELOW QUANTITATION LIMITS

- A. The parameter(s) listed below are subject to water quality-based effluent limits (WQBELs) in Part A of this permit that are necessary to comply with state water quality standards, but may be less than quantitation limits (QLs), as defined in 25 Pa. Code § 252.1, that are generally achievable by conventional analytical technology. The permittee shall analyze the parameter(s) using methods that will achieve the QL(s) as listed below. For the purpose of compliance, a statistical value reported on the DMR that is less than the QL(s) (i.e., "non-detect") will be considered to be in compliance.

Parameter Name	Quantitation Limit (mg/l)
4,4-DDT	0.00005
4,4-DDE	0.00005
4,4-DDD	0.00005

Compliance with all concentration limits for the above referenced parameters in Part A will be achieved when the QLs are achieved. Compliance with all mass load limits for these parameters in Part A will be achieved when the reported load is less than or equal to 0.00012 lbs/day, which is based on the QLs and the design flow rate for Outfall 001.

- B. The permittee shall, where determined to be feasible by the permittee, achieve a QL less than the QL identified above to improve the level of confidence that state water quality standards are being met in the receiving waters.
- C. The permittee shall manage non-detect values and report statistical results to DEP in accordance with published DMR guidance (3800-BK-DEP3047 and 3800-FS-DEP4262). Where a mixed data set exists containing non-detect results and "detected" values (i.e., results greater than or equal to the QL), the QL shall be used for non-detect results to compute average statistical results.

VIII. Control and Sampling Requirements for Leachate Impacted Stormwater Basin(s)

- A. Where any known impact(s) from a leachate seep to a stormwater basin(s) is/are identified, the following steps will be taken:
 - 1) Notify the Department of the impact(s) in accordance with Part A., C., 3.,
 - 2) Implement measures to isolate the seep impacts from/in the basin(s);
 - 3) When the basin(s) is/are actively discharging:
 - a. The permittee shall immediately plug the outfall of any impacted basin(s) utilizing an inflatable or mechanical plug, or another plugging approach with the approval of the Department.
 - b. The discharge(s) will be sampled*(see Footnote) and analyzed for: pH, Ammonia, Total Suspended Solids, Chemical Oxygen Demand, Total Dissolved Solids, Chlorides and Conductivity.
 - c. Levels in the basin(s) shall be maintained to prevent the discharge of contaminated stormwater.
 - d. If the initial sample result(s) from the basin(s) exceed the benchmark value(s) in Part C Section V. STORMWATER MONITORING REQUIREMENTS (F) of this permit the permittee shall remove contaminated stormwater from the stormwater basin(s) for treatment at the permittee's onsite wastewater treatment plant or an offsite wastewater treatment plant authorized to accept this type of waste load.
 - e. If the initial sample result(s) do not exceed the benchmark values, maintain the basin(s) level and conduct daily sampling *(see Footnote) of the basin(s):
 - i. The basin will be analyzed by the permittee or an accredited laboratory for: pH, Ammonia, Total Suspended Solids, Chemical Oxygen Demand, Total Dissolved Solids, Chlorides and Conductivity. Samples shall consist of a composite of three (3) to five (5) grab samples collected at evenly spaced intervals along the mid-length of the basin as can be safely obtained. An even distribution of the grab samples throughout the basin is required.
 - ii. Sampling*(see Footnote) shall continue daily until three consecutive days of sample results are below the benchmark value(s) in Part C Section V. STORMWATER MONITORING REQUIREMENTS (F) of this permit. At least the third-day sample shall be analyzed by an accredited laboratory. Once three consecutive days of samples are below the benchmark values, the plug(s) may be removed and the discharge of stormwater may be allowed so long as there are no continued or additional leachate impacts or suspected impacts identified.

f. Should the plug(s) fail and a discharge commence from the outfall(s) the permittee will:

1. Notify the Department immediately of the failure;
2. Immediately take the necessary steps to repair the plug(s) and stop the discharge(s) or collect the discharge(s) and pump it/them back into the basin(s).
3. The discharge(s) will be sampled *(see Footnote) and analyzed for: pH, Ammonia, Total Suspended Solids, Chemical Oxygen Demand, Total Dissolved Solids, Chlorides and Conductivity.
4. Should the permittee be unable to re-establish the plug(s), the discharge from the basin(s) shall continue to be sampled daily until three consecutive days of sample results do not exceed the benchmark value(s) in Part C Section V. STORMWATER MONITORING REQUIREMENTS (F) of this permit. The third-day sample shall be analyzed by an accredited laboratory. If benchmark values are not exceeded, then the daily sampling and attempts to re-establish the plug(s) may cease, so long as there are no continued or additional leachate impacts or suspected impacts identified.

4) When the basin(s) is/are not actively discharging:

- a. Conduct daily sampling *(see Footnote) of the basin(s) consisting of a composite of three (3) to five (5) grab samples collected at evenly spaced intervals along the mid-length of the basin(s), as can be safely obtained. An even distribution of the grab samples throughout the basin is required. The samples shall be analyzed for: Ammonia, Total Suspended Solids, Chemical Oxygen Demand, Total Dissolved Solids, Chlorides and Conductivity.
- b. If the initial sample result(s) from the basin(s) exceed the benchmark value(s) in Part C Section V. STORMWATER MONITORING REQUIREMENTS (F) of this permit the permittee shall remove contaminated stormwater from the stormwater basin(s) for treatment at the permittee's onsite wastewater treatment plant or an offsite wastewater treatment plant authorized to accept this type of waste load.
- c. If the initial sample results do not exceed the benchmarks continue to conduct daily sampling of the basin(s) until three consecutive days of sample results are below the benchmark value(s) in Part C Section V. STORMWATER MONITORING REQUIREMENTS (F) of this permit. The third-day sample shall be analyzed by an accredited laboratory. Once three consecutive days of samples are below the benchmark values, the basin(s) may be placed back in normal service and the discharge of stormwater may be allowed so long as there are no continued, additional or suspected leachate impacts identified.
- d. If any of the three-daily sample result(s) from the basin(s) exceed the benchmark value(s) in Part C Section V. STORMWATER MONITORING REQUIREMENTS (F) of this permit the permittee shall remove contaminated stormwater from the stormwater basin(s) for treatment at the permittee's onsite wastewater treatment plant or an offsite wastewater treatment plant authorized to accept this type of waste load.

B. Where there are suspected impact(s) to a stormwater basin(s), the following steps will be taken:

- 1) Notify the Department as per the Reporting Requirements in Part A., C., 3.,
- 2) Implement measures to isolate any suspected impacts from/in the basin(s) and determine if there are active leachate seeps;
- 3) Conduct Initial Sampling*(see Footnote). The discharge(s) will be analyzed by an accredited laboratory for: pH, Ammonia, Total Suspended Solids, Chemical Oxygen Demand, Total Dissolved Solids, Chlorides and Conductivity. If the basin(s) is(are) not discharging, samples shall consist of a composite of three (3) to five (5) grab samples collected at evenly spaced intervals along the mid-length of the basin(s) as can be safely obtained. An even distribution of the grab samples throughout the basin(s) is(are) required.

- 4) If the initial sample results from the basin(s) are below the benchmark value(s) in Part C Section V. STORMWATER MONITORING REQUIREMENTS (F) of this permit, the permittee shall investigate the suspected impact, but no further sampling of the basin(s) will be required.
- 5) If the initial sample result(s) from the basin(s) exceed the benchmark value(s) in Part C Section V. STORMWATER MONITORING REQUIREMENTS (F) of this permit and the basin(s) is/are discharging, the permittee shall follow the conditions under 3. a-f above.
- 6) If the initial sample results from the basin(s) exceed the benchmark value(s) in Part C Section V. STORMWATER MONITORING REQUIREMENTS (F) of this permit and the basin(s) are not actively discharging, the permittee shall follow the conditions under 4. a-d above.

Footnote: Samples shall be analyzed with results of any analyses performed by the Permittee on-site made available to the Department within six (6) hours and results analyzed by an accredited laboratory shall be provided to the Department within 48 hours of the collection of the sample.



TAB 4

Permit Renewal



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY PROGRAM

PLAN APPROVAL

Issue Date: June 4, 2019
Revision Date: December 5, 2024
Revision Type: Extension

Effective Date: December 3, 2024
Expiration Date: June 3, 2025

In accordance with the provisions of the Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, as amended, and 25 Pa. Code Chapter 127, the Owner, [and Operator if noted] (hereinafter referred to as permittee) identified below is authorized by the Department of Environmental Protection (Department) to 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. 09-0210B

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

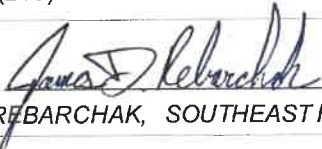
Responsible Official

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 for the installation of three (3), 6,000 SCFM design capacity ultra low emission flares to combust the landfill gas collected from GROWS, GROWS North, and Fairless Landfills, and for the installation of two (2) related emergency generator engines.



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

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**SECTION A. Plan Approval Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
500	EXEMPT EMERGENCY GENERATOR ENGINES	N/A	Diesel Fuel
C12	ENCLOSED ULE FLARE 1	360.000 MCF/HR	LANDFILL GAS
C13	ENCLOSED ULE FLARE 2	360.000 MCF/HR	LANDFILL GAS
C14	ENCLOSED ULE FLARE 3	360.000 MCF/HR	LANDFILL GAS
S12	ENCLOSED ULE FLARE STACK 1 (C100)		
S13	ENCLOSED ULE FLARE STACK 2 (C120)		
S14	ENCLOSED ULE FLARE STACK 3 (C140)		
S500	EXEMPT EMERGENCY GENERATOR STACKS		

PERMIT MAPS

PROC
500 → STAC
S500

CNTL
C12 → STAC
S12

CNTL
C13 → STAC
S13

CNTL
C14 → STAC
S14

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

Emissions of criteria pollutants from the facility, which consist of three flares and two emergency generator engines, shall be limited to the following, based on a 12-month rolling sum:

NO_x: 65.35 tons/year

SO_x: 239.54 tons/year

CO: 143.55 tons/year

VOC: 21.55 tons/year

Facility-wide PM-10 and PM-2.5 emissions shall each be restricted to 100.0 tons/year.

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.**# 002 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) The permittee shall calculate and monitor emissions of the following criteria pollutants from the facility, which consist of the three enclosed ZULE flares and two emergency generator engines, on a monthly, and 12-month rolling basis:

- NO_x

- CO

- SO₂

- VOC

(b) The permittee shall calculate and monitor emissions of the following pollutants from each of the 3 landfill areas (GROWS, GROWS North, and Fairless), on a monthly, and 12-month rolling basis:

- PM-10

- PM-2.5

IV. RECORDKEEPING REQUIREMENTS.**# 003 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) The permittee shall maintain records of the following criteria pollutants from the facility, which consist of the three enclosed ZULE flares and two emergency generator engines, on a monthly, and 12-month rolling basis:

- NO_x

- CO

- SO₂

- VOC

(b) The permittee shall maintain records of the sum of emissions of the following pollutants from each of the 3 landfill areas (GROWS, GROWS North, and Fairless), on a monthly, and 12-month rolling basis:

- PM-10

- PM-2.5

**SECTION C. Site Level Plan Approval 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.**# 004 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The permittee shall comply with all existing requirements of Plan Approval 09-0210, Plan Approval 09-0007C, and Title V Operating Permit 09-00007, unless specifically revised in this Plan Approval.

005 [25 Pa. Code §127.208]**ERC use and transfer requirements.**

(a) The permittee shall use and transfer Emission Reduction Credits (ERCs) in accordance with 25 Pa. Code § 127.208.

(b) This Plan Approval authorizes the transfer and use of the following 107.0 tons per year of NOx ERCs and the following 60.0 tons per year VOC ERCs for offset purposes for Plan Approval 09-0210B at Waste Management's facility, Falls Township, Bucks County, PA pursuant to 25 Pa. Code §127.208(2).

(i) The 107.0 tons per year NOx ERCs were generated by the shutdown of the HRE Sparrow's Point facility, Baltimore County, MD on September 14, 2012.

The 60.0 tons per year VOC ERCs were generated by a shutdown of the Quad Graphics, Inc Atglen Pant, West Sadsbury Township, Chester County PA on March 4, 2016 and certified on February 7, 2017.

(ii) The 107.0 tons per year NOx ERCs were certified by the Maryland Department of the Environment (MDE) on May 16, 2014 and transferred to DEPs ERC Registry through the "Reciprocity Agreement" for the interstate trading of ERCs between DEP and MDE.

(iii) DEP approved the transfer of the 107.0 tons per year of NOx ERCs to Waste Management of Fairless, LLC on May 31, 2019.

DEP approved the transfer of the 60.0 tons per year VOC ERCs from Elements Markets, LLC to Waste Management's facility, Falls Township, Bucks County, PA on May 31, 2019.

(iv) The 107.0 tons per year of NOx ERCs will expire on September 14, 2022 and the 60.0 tons per year VOC ERCs will expire on March 4, 2026, in accordance with 25 Pa. Code Section 127.206 (g) , if not used for the ZULE flares and emergency generator project in Plan Approval 09-0210B and re-entered into DEP's ERC Registry.

006 [25 Pa. Code §127.210]**Offset ratios.**

(a) The 10-year aggregated VOC emission increase including this project is 46.0 tons.

(b) The permittee shall provide VOC ERCs at a 1.3:1 ratio to offset the net emission increase of 46.0 tons as per 25 Pa. Code §§ 127.210. The required VOC ERCs is 60.0 tons.

(c) The permittee shall not commence operation of any of the sources covered by this Plan Approval, any of the three 6,000 SCFM design capacity ZULE flares or either of the two emergency generator engines until the transfer of 60.0 tons of VOC ERCs are approved by the Department.

**SECTION C. Site Level Plan Approval Requirements****# 007 [25 Pa. Code §127.210]****Offset ratios.**

- (a) The 5-year aggregated NO_x emission increase including this project is 82.23 tons.
- (b) The permittee shall provide NO_xERCs at a 1.3:1 ratio to offset the net emission increase of 82.23 tons as per 25 Pa. Code §§ 127.210. The required NO_xERCs is 107.0 tons.
- (c) The permittee shall not commence operation of any of the sources covered by this Plan Approval, any of the three 6,000 SCFM design capacity ZULE flares or either of the two emergency generator engines until the transfer of 107.0 tons of NO_x ERCs are approved by the Department.

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: 500

Source Name: EXEMPT EMERGENCY GENERATOR ENGINES

Source Capacity/Throughput:

N/A

Diesel Fuel

PROC
500STAC
S500**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §123.21]****General**

No person may permit the emission into the outdoor atmosphere of sulfur oxides from any of these emergency generators in a manner that the concentration of the sulfur oxides, expressed as SO₂, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

002 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

For all engines listed under this source, the permittee shall limit total combined NO_x emissions to less than 100 lbs/hr, 1000 lbs/day, 2.75 tons per ozone season and 6.6 tons per year on a 12-month rolling basis.

The ozone season is defined to be the period from May 1st - September 30th.

003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4205]**Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal co**

(a) In accordance with 40 CFR § 60.4202(a)(2), the 500 kW engine shall comply with the following certification emission standards of 40 CFR § 89.112:

- (1) NMHC + NO_x = 6.4 g/kW-hr
- (2) CO = 3.5 g/kW-hr
- (3) PM = 0.20 g/kW-hr

(b) The 750 kW engine shall comply with the following certification emission standards of 40 CFR § 89.112:

- (1) NMHC + NO_x = 10.5 g/kW-hr
- (2) CO = 3.5 g/kW-hr
- (3) PM = 0.20 g/kW-hr

(c) In accordance with 40 CFR § 89.113, exhaust opacity from compression-ignition nonroad engines shall not exceed the following:

- (1) 20 percent during the acceleration mode;
- (2) 15 percent during the lugging mode; and
- (3) 50 percent during the peaks in either acceleration or lugging modes.

Fuel Restriction(s).**# 004 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

Only diesel fuel oil shall be used in the operation of any of these generator engines.

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

005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4207]
Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this permit condition?
Authority for this permit condition is derived from 40 CFR § 60.4207(b) and 40 CFR § 80.510(b).

The permittee shall ensure that all diesel fuel used complies with the following requirements.

Beginning June 1, 2010, all non-road diesel fuel is subject to the following per gallon standards:

- Maximum sulfur content = 15 ppm; and
- Minimum cetane index = 40 or Maximum aromatic content = 35 % by volume

[Fuel supplier certifications may be used to demonstrate compliance with these standards.]

Operation Hours Restriction(s).

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

The permittee shall limit the hours of operation for each engine to 500 hours per year, based on a 12-month rolling sum.

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.

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

The permittee shall monitor the hours of operation and fuel usage for each engine, on a monthly and 12-month rolling basis, when operated.

IV. RECORDKEEPING REQUIREMENTS.

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

(a) The permittee shall maintain records of the hours of operation and fuel usage for each engine, on a monthly basis, and as a twelve (12) month rolling sum.

(b) The permittee shall calculate and maintain records of NOx emission calculations for each emergency generator engine on a monthly, and 12-month rolling basis.

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.

009 [25 Pa. Code §127.12b]
Plan approval terms and conditions.

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

This source shall be operated and maintained in accordance with manufacturer's specifications.

010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4211]
Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

In accordance with 40 CFR § 60.4211(c), compliance with the emission certification standards of 40 CFR § 60.4205 shall be purchasing an engine certified to the emission standards for the same model year and maximum engine power. These engines shall be installed and configured according to the manufacturer's emission-related specifications.

011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4211]
Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

(a) The permittee shall operate the emergency stationary R.I.C.E. according to the requirements in the most recent version of 40 C.F.R. Section 60.4211(f).

(b) If the permittee does not operate the engine according to the requirements of 40 C.F.R. Section 60.4211(f), the engine will not be considered an emergency engine under 40 C.F.R. Part 63 Subpart III and must meet all requirements for nonemergency engines.

VII. ADDITIONAL REQUIREMENTS.

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

This source consists of the following:

(a) Fairless Compressor Emergency Generator 1 - manufactured by Cummins, Model QSX1K23-G7 NR2 with a rating of 750 kW, 1135 bhp

(b) GROWS North Compressor Emergency Generator - manufactured by Cummins, Model QSX15-G9 NR2 with a rating of 500 kW, 732 bhp

013 [25 Pa. Code §129.203]
Stationary internal combustion engines.

The following is applicable to the 750 kW Fairless Compressor Emergency Generator:

(a) Each year, the owner or operator of the stationary internal combustion engine shall calculate the difference between the actual emissions from the unit during the period from May 1 through September 30 and the allowable emissions for that period.

(b) The owner or operator shall calculate allowable emissions by multiplying the cumulative hours of operations for the unit for the period by the horsepower rating of the unit and by 2.3 grams of NOx per brake horsepower-hour.

014 [25 Pa. Code §129.204]
Emission accountability.

The following is applicable to the 750 kW Fairless Compressor Emergency Generator:

(a) The owner or operator shall determine actual emissions in accordance with one of the following:

(1) If the owner or operator of the unit is not required to monitor NOx emissions with a CEMS, one of the following shall be used to determine actual emissions of NOx

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

(i) The 1-year average emission rate calculated from the most recent permit emission limit compliance demonstration test data for NO_x.

(ii) The maximum hourly allowable NO_x emission rate contained in the permit or the higher of the following:

(A) The highest rate determined by use of the emission factor for the unit class contained in the most up-to-date version of the EPA publication, "AP-42 Compilation of Air Pollution Emission Factors."

(B) The highest rate determined by use of the emission factor for the unit class contained in the most up-to-date version of EPA's "Factor Information Retrieval (FIRE)" data system.

(iii) An alternate calculation and recordkeeping procedure based upon emissions testing and correlations with operating parameters. The operator of the unit shall demonstrate that the alternate procedure does not underestimate actual emissions throughout the allowable range of operating conditions. In regard to obtaining the Department's approval for an alternate calculation method and recordkeeping procedure for actual emissions, the owner or operator may request an adjustment to the allowable emissions calculations set forth in § § 129.201—129.203. An allowable emission adjustment may not overestimate a unit's allowable emissions and must be based upon the parameters and procedures proposed in the alternate calculation method for actual emissions. The alternate calculation and recordkeeping procedures must be approved by the Department, in writing, prior to implementation.

(b) The owner or operator of a unit subject to this section shall surrender to the Department one CAIR NO_x allowance and one CAIR NO_x Ozone Season allowance, as defined in 40 CFR 96.102 and 96.302 (relating to definitions), for each ton of NO_x by which the combined actual emissions exceed the allowable emissions of the units subject to this section at a facility from May 1 through September 30. The surrendered allowances shall be of current year vintage. For the purpose of determining the amount of allowances to surrender, any remaining fraction of a ton equal to or greater than 0.50 ton is deemed to equal 1 ton and any fraction of a ton less than 0.50 ton is deemed to equal zero tons.

(c) If the combined allowable emissions from units subject to this section at a facility from May 1 through September 30 exceed the combined actual emissions from units subject to this section at the facility during the same period, the owner or operator may deduct the difference or any portion of the difference from the amount of actual emissions from units subject to this section at the owner or operator's other facilities.

(d) By November 1, 2005, and by November 1 of each year thereafter, an owner or operator of a unit subject to this section shall surrender the required NO_x allowances to the Department's designated NO_x allowance tracking system account and provide to the Department, in writing, the following:

(1) The serial number of each NO_x allowance surrendered.

(2) The calculations used to determine the quantity of NO_x allowances required to be surrendered.

(e) If an owner or operator fails to comply with subsection (d), the owner or operator shall by December 31 surrender three NO_x allowances of the current or later year vintage for each NO_x allowance that was required to be surrendered by November 1 of that year.

(f) The surrender of NO_x allowances under subsection (e) does not affect the liability of the owner or operator of the unit for any fine, penalty or assessment, or an obligation to comply with any other remedy for the same violation, under the CAA or the act.

(1) For purposes of determining the number of days of violation, if a facility has excess emissions for the period May 1 through September 30, each day in that period (153 days) constitutes a day in violation unless the owner or operator of the unit demonstrates that a lesser number of days should be considered.

(2) Each ton of excess emissions is a separate violation.

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

Source ID: C12

Source Name: ENCLOSED ULE FLARE 1

Source Capacity/Throughput:

360.000 MCF/HR

LANDFILL GAS

Conditions for this source occur in the following groups: ENCLOSED FLARES

CNTL
C12STAC
S12**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

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

Source ID: C13

Source Name: ENCLOSED ULE FLARE 2

Source Capacity/Throughput:

360.000 MCF/HR

LANDFILL GAS

Conditions for this source occur in the following groups: ENCLOSED FLARES

CNTL
C13STAC
S13**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

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

Source ID: C14

Source Name: ENCLOSED ULE FLARE 3

Source Capacity/Throughput:

360.000 MCF/HR

LANDFILL GAS

Conditions for this source occur in the following groups: ENCLOSED FLARES

CNTL
C14STAC
S14**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

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

Group Name: ENCLOSED FLARES

Group Description: Shared Conditions

Sources included in this group

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

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

[Additional authority for this permit condition is also derived from 40 CFR § 60.762 - Standards for air emissions from municipal solid waste landfills.]

Each flare shall be designed and operated to either reduce nonmethane organic compounds (NMOC) as hexane by 98 weight percent or reduce the outlet NMOC concentration to less than 20 ppmv, dry basis has hexane @ 3% oxygen. Compliance with the reduction efficiency or parts per million by volume requirements must be established by an initial performance test to be completed no later than 180 days after the initial startup using the test methods specified in 40 CFR § 60.764(d) and the methods specified in the Plan Approval.

002 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The particulate matter (PM) emissions from each flare shall not exceed 0.02 gr/dscf.

003 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

Each enclosed flare shall comply with the following emissions limits:

VOC (as hexane):	1.63 lb/hr	7.14 tpy
NOx, 0.025 lb/MMBtu:	4.54 lb/hr	19.90 tpy
CO, 0.06 lb/MMBtu:	10.9 lb/hr	47.76 tpy
SO ₂ :	18.22 lb/hr	79.81 tpy
PM, PM-10, PM-2.5:	2.70 lb/hr	11.83 tpy (filterable and condensable)

Fuel Restriction(s).**# 004 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) Each enclosed flare shall burn on-site landfill gas generated from GROWS, GROWS North, and Fairless Landfills only, except when auxiliary fuel is used during restart or start-up.

(b) The enclosed flares shall be used as the primary control of landfill gas from the three landfill areas at all times, except when the gas is being accepted by an end user. On an interim basis, as in the case of maintenance on the ultra-low emissions flares, landfill gas may be sent to the Back-Up Enclosed Flares (Source IDs C03, C05, and C06) subject to the limitations and conditions in TVOP 09-00007 and to the Back-Up Enclosed Flares (Source IDs C10 and C11) subject to the limitations and conditions in Plan Approval 09-0210A.

**SECTION E. Source Group Plan Approval Restrictions.****Throughput Restriction(s).****# 005 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The landfill gas flow through each flare shall be limited to less than 5,000 scfm.

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

(a) The permittee shall perform a stack test on each installed flare unless all three flares are identical, to which, one stack test may be performed on one representative flare. Otherwise, a stack test is required for each differing flare.

Stack testing shall be conducted using Department-approved procedures, to show compliance with the emission limits. Source testing shall be performed within 180 days after startup of the source and/or control device. Source testing shall be performed for the following pollutants: NO_x, CO, VOC (as hexane), SO₂, and PM (filterable and condensable), and expressed in units of lb/MMBtu and lb/hr for NO_x and CO, and lb/hr for all other pollutants. 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.

If testing of multiple flares are necessary, testing need not be conducted at the same time, but must be conducted within the 180 day startup time period.

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

(c) Stack tests shall, at a minimum, test for the pollutants NO_x, CO, VOC, SO₂, and filterable and condensable PM. Tests shall be conducted in accordance with the provisions of 40 CFR § 60.764, Method 7E, Method 10, Method 6C, Method 25 or 25A in conjunction with Method 18, Method 5 or 202, and the Department's source testing procedures described in the latest Source Testing Manual or other Department approved methodology and 25 Pa. Code Chapter 139. The final decision on approvable methods lies with the Department's Source Testing Division.

(d) At least thirty (30) days prior to the test, the Regional Air Quality Manager, shall be informed of the date and time of the test.

(e) Within sixty (60) days after the source test(s), two copies of the complete test report, including all operating conditions, shall be submitted to the Regional Air Quality Manager for approval.

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

[Compliance with the requirements of this permit condition assures compliance with the requirements specified in 40 CFR § 60.764(d). Test methods and procedures.]

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

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

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

1. Test Date(s)

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

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

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

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

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

4. Testing Requirements (all that apply)

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

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

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

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

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

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

Central Office
RA-EPstacktesting@pa.gov

Southeast Region
RA-EPSEstacktesting@pa.gov

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

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

III. MONITORING REQUIREMENTS.

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

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

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

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

monthly and 12-month rolling basis. Emission factors from the plan approval application shall be used for calculation purposes until factors have been established from performance testing.

009 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The permittee shall monitor the methane (CH₄) content of the landfill gas to each 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 Condition #012 of this section.
- (b) The Department may approve an alternate device or procedure for determining methane content, upon notice, in case of unavailability of a field test meter.
- (c) The Department reserves the right to re-evaluate these conditions for methane monitoring of landfill gas to the flare and require alternate or additional monitoring conditions.

IV. RECORDKEEPING REQUIREMENTS.**# 010 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The permittee shall record the following for each enclosed flare:

- (a) Hours of operation, on a monthly and 12-month rolling basis.
- (b) Gas flow rate, every 15 minutes, in scfm.
- (c) Average CH₄ content on a monthly basis.
- (d) The field calibration check for the meter used to measure the methane content
- (e) The initial temperature set point of the flare and any change afterwards.
- (f) Maintenance performed on the flares.

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

[Additional authority for this permit condition is also derived from 40 CFR § 60.768(b)(2), (b)(5), (c)(1)(i), (c)(2), (c)(5), and (i). Recordkeeping Requirements.]

The permittee shall maintain records of the following:

- (a) The average temperature measured at least every 15 minutes and averaged over the same time period of the performance test.
- (b) The percent reduction of NMOC determined as specified in 40 CFR § 60.762(b)(2)(iii)(B) achieved by the control device.
- (c) Bypass records. Records of the flow of landfill gas to, and bypass of, the treatment system.
- (d) Except as provided in 40 CFR § 60.767(c)(2), each owner or operator of a controlled landfill subject to the provisions of this subpart must keep for 5 years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in 40 CFR § 60.766 as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.

(1) The following constitute exceedances that must be recorded and reported under 40 CFR § 60.767(g):

- (i) For enclosed combustors, all 3-hour periods of operation during which the average temperature was more than 28

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

degrees Celsius (82 degrees Fahrenheit) below the average combustion temperature during the most recent performance test at which compliance with 40 CFR § 60.762(b)(2)(iii) was determined.

(2) Each owner or operator subject to the provisions of this subpart must keep up-to-date, readily accessible continuous records of the indication of flow to the control system and the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines, specified under 40 CFR § 60.766.

(3) Each 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 keep records of periods when the collection system or control device is not operating.

(e) Any records required to be maintained by this subpart that are submitted electronically via the EPA's CDX may be maintained in electronic format.

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

The facility shall monitor and record the landfill gas flow rate through each ULE flare as follows:

- (a) Hourly- average of all 15-minute readings within a given hour
- (b) Daily - average of all hourly readings within a 24 hour day as defined in 25 Pa Code § 121.1

V. REPORTING REQUIREMENTS.**# 013 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

[Additional authority for this permit condition is also derived from 40 CFR § 60.767(h) and (i). Reporting Requirements.]

(a) Initial performance test report. Each owner or operator seeking to comply with 40 CFR § 60.762(b)(2)(iii) must include the following information with the initial performance test report required under 40 CFR § 60.8:

- (1) A diagram of the collection system showing collection system positioning including all wells, horizontal collectors, surface collectors, or other gas extraction devices, including the locations of any areas excluded from collection and the proposed sites for the future collection system expansion;
- (2) The data upon which the sufficient density of wells, horizontal collectors, surface collectors, or other gas extraction devices and the gas mover equipment sizing are based;
- (3) The documentation of the presence of asbestos or nondegradable material for each area from which collection wells have been excluded based on the presence of asbestos or nondegradable material;
- (4) The sum of the gas generation flow rates for all areas from which collection wells have been excluded based on nonproductivity and the calculations of gas generation flow rate for each excluded area;
- (5) The provisions for increasing gas mover equipment capacity with increased gas generation flow rate, if the present gas mover equipment is inadequate to move the maximum flow rate expected over the life of the landfill; and
- (6) The provisions for the control of off-site migration.

(b) Electronic reporting. The owner or operator must submit reports electronically according to paragraphs (1) and (2) below:

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

(i) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT Web site (https://www3.epa.gov/ttn/chief/ert/ert_info.html) at the time of the test, you must submit the results of the

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

performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>). Performance test data must be submitted in a file format generated through the use of the EPA's ERT or an alternative file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT Web site, once the XML schema is available. If you claim that some of the performance test information being submitted is confidential business information (CBI), you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT Web site, including information claimed to be CBI, on a compact disc, flash drive or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph.

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

(2) Each owner or operator required to submit reports following the procedure specified in this paragraph must submit reports to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) The owner or operator must use the appropriate electronic report in CEDRI for this subpart or an alternate electronic file format consistent with the XML schema listed on the CEDRI Web site (<https://www3.epa.gov/ttn/chief/cedri/index.html>). If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the owner or operator must submit the report to the Administrator at the appropriate address listed in 40 CFR § 60.4. 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.

VI. WORK PRACTICE REQUIREMENTS.**# 014 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The enclosed flares shall meet the following criteria:

- (a) Each flare shall be equipped with an automatic pilot ignition source using an auxiliary fuel (e.g. propane or natural gas);
- (b) Each flare shall be operated with a flame present at all times. The enclosed flare shall be equipped with an automatic shut-off mechanism designed to immediately stop the flow of gases when a flame-out occurs. During the restart or start-up, there should be sufficient flow of auxiliary fuel to the burners such that unburned landfill gases are not emitted to the atmosphere.
- (c) The temperature sensor associated with the continuous temperature monitor shall be positioned so that it will indicate the temperature of the gases.
- (d) In the event that a flare is operating at less than 1500°F, or other minimum temperature established by a stack test, for a 3 hour period of operation based on rolling hourly data taken over the 3-hour period, it should be turned off as soon as practical after discovery. The cause should be investigated and corrected before the flare is restarted.

015 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The field meter, used for monitoring methane content of the landfill gas to the flares, 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.

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

[Additional authority for this permit condition is also derived from 40 CFR § 60.762 - Standards for air emissions from municipal solid waste landfills.]

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

Each flare must be operated within the parameter ranges established during the initial or most recent performance test. The operating parameters to be monitored are specified in 40 CFR § 60.766.

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

The following conditions apply to each enclosed flare:

- (a) The enclosed flares shall be designed such that there are no visible flames during normal operations.
 - (b) The enclosed flares shall be operated with no visible emissions, except for periods not to exceed a total of five minutes during any two consecutive hours.
 - (c) Each enclosed flare shall maintain, for each 3-hour period of operation based on rolling hourly data, an average combustion temperature no more than 28°C (50.4°F) below the average combustion temperature during the most recent performance test in which compliance with the destruction/removal requirement was demonstrated. If there has been no performance test, then a minimum temperature of 1500°F will be necessary.
 - (d) The enclosed flares may be operated at a lower temperature provided that the company has demonstrated, by a stack test that the flares will achieve the 98% destruction/removal efficiency or 20 ppmdv, measured as hexane and corrected to 3% oxygen, at the lower temperature and complies with all the emission limits established in the plan approval. If compliance has been demonstrated at the lower temperature, the owner or operator of the landfill should submit a plan approval application to make the lower operating temperature enforceable.
- If the MSW landfill has an operating permit, then a minor operating permit modification, which complies with 25 Pa. Code Section 127.462, should be submitted. Operation at the lower temperature cannot occur until approved by DEP. Under no circumstance will DEP approve an operating temperature less than 1200°F.
- (e) The flue gas temperature of each enclosed flare should be measured and recorded in the combustion zone as per the manufacturer's specifications based on the flow into the flare. The temperature in the combustion zone should be used to determine compliance with the minimum temperature requirement. The temperature monitoring device should meet the 40 C.F.R. Section 60.756(b) requirements.

018 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

[Additional authority for this permit condition is also derived from 40 CFR § 60.763(f). Operational standards for collection and control systems.]

The permittee shall operate the flares at all times when the collected gas is routed to the system.

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

[Additional authority for this permit condition is also derived from 40 CFR § 60.766(b). Monitoring of Operations.]

The permittee shall calibrate, maintain, and operate the following equipment, according to the manufacturer's specifications:

- (1) A temperature monitoring device equipped with a continuous recorder and having a minimum accuracy of ± 1 percent of the temperature being measured expressed in degrees Celsius or ± 0.5 degrees Celsius, whichever is greater.
- (2) A device that records flow to the control device and bypass of the control device (if applicable). The owner or operator must:
 - (i) Install, calibrate, and maintain a gas flow rate measuring device that must record the flow to the control device at least every 15 minutes; or

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

(ii) 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.

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

[Additional authority for this permit condition is also derived from 40 CFR § 60.769(c). Specifications for active collection systems.]

Each owner or operator seeking to comply with 40 CFR § 60.762(b)(2)(iii) must convey the landfill gas to a control system in compliance with 40 CFR § 60.762(b)(2)(iii) through the collection header pipe(s). The gas mover equipment must be sized to handle the maximum gas generation flow rate expected over the intended use period of the gas moving equipment using the following procedures:

(1) For existing collection systems, the flow data must be used to project the maximum flow rate. If no flow data exists, the procedures in paragraph (2) of this condition must be used.

(2) For new collection systems, the maximum flow rate must be in accordance with 40 CFR § 60.765(a)(1).

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

[Additional authority for this permit condition is also derived from 40 CFR §§ 63.1960 - 63.1985. National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills.]

The permittee shall comply with all applicable requirements of 40 CFR Part 63, Subpart AAAA for developing a written startup, shutdown, and malfunction (SSM) plan, procedures for operating and maintaining the source during periods of SSM, and a program of corrective action for malfunctioning process, air pollution control, and monitoring equipment used for compliance. A copy of the SSM plan must be maintained on site.

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

The facility shall take the following actions for landfill gas (LFG) flow rates greater than 4,900 scfm:

(A) An exceedance period is defined as a continuous period during which the LFG flow rate of a flare exceeds the trigger value of 4,900 scfm for more than 25% of hourly averages in a 24 hour day, as defined in 25 Pa Code § 121.1. The exceedance period is considered ended once readings are equal to or less than 4,900 scfm for more than 75% of hourly averages in a 24 hour day.

(B) If an exceedance period occurs for a 24 hour day, as defined in 25 Pa Code § 121.1, the facility shall:

- (1) Notify the DEP Southeast Regional office at:
Ashley Davis, District Supervisor (ashldavis@pa.gov)
Jill Gallagher, Environmental Group Manager, Operations (jigallaghe@pa.gov)
Audra Safter-Myers, Permit Engineer (asaftermye@pa.gov)
James Beach, Environmental Engineering Manager (jamesbeach@pa.gov)

(2) Notification must be submitted within 24 hrs after the discovery of the exceedance. The notification must contain the Source ID of flare(s) with exceedance(s), the hours the exceedances occurred and the landfill gas flow rates for exceedance hours.

(C) If an exceedance period extends to more than a continuous 48 hr period, the facility shall:

- (1) Notify DEP as stated in paragraph (B) of this condition.
- (2) Monitor and record H₂S concentrations in the LFG for an 8 hour continuous period.

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

(a) LFG must be monitor with equipment capable of one of the following:

- (i) The equipment shall have a 0-500 ppm H₂S concentration range with a +/- 2.5% accuracy minimum.
- (ii) Alternatively, a different concentration range or equipment may be used if the concentration of H₂S is not less than 25% of the equipment's calibrated range. The minimum accuracy for alternative equipment shall be +/- 2.5%.

(b) The equipment shall be calibrated using manufacturer's specifications before monitoring begins and 4 hours after the beginning of monitoring.

(c) The H₂S concentration and LFG flow rate will be monitored and recorded hourly for the continuous 8 hour period.

(d) The LFG monitoring must be completed within 72 hours of the start of the exceedance period.

(e) The results of the monitoring shall be reported to the Department the day after the monitoring is completed.

(D) If an exceedance period extends to more than a continuous 96 hour period, the facility shall schedule stack testing for SO₂ using EPA Method 6C for the flare(s) with the exceedance. The facility shall present to the Department possible dates for the stack testing within one week of reaching a 96 hour exceedance period. The facility will inform the Department of the date of the stack testing at least 15 day before the testing date. Should the exceedance period end, as defined in paragraph A of this condition, before stack testing is performed, the facility will still be required to stack test the flare(s) that had an exceedance period.

(E) If the facility installs a control for H₂S in the LFG, with acceptable performance testing as proof of control of H₂S, the facility may petition the Department to modify and / or remove the monitoring, recording and testing requirements related to the 4,900 scfm trigger value and testing for H₂S. All other conditions and requirements of for the ULE flares in this plan approval shall remain in effect.

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

[Additional authority for this permit condition is also derived from 40 CFR § 60.765(e). Compliance provisions.]

The provisions of 40 CFR Part 60, Subpart XXX set forth in this permit shall apply at all times, including periods of startup, shutdown or malfunction. During periods of startup, shutdown, and malfunction, the permittee shall comply with the work practices specified in 40 CFR § 60.763(e) in lieu of the compliance provisions in 40 CFR § 60.765.

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

This source consists of three (3) Zink Ultra Low Emission (ZULE) enclosed ground flares, each rated at 6,000 SCFM, with a residence time of 0.7 seconds, manufactured by John Zink Hamworthy Combustion, LLC, or equivalent.

**SECTION F. Alternative Operation Requirements.**

No Alternative Operations exist for this Plan Approval facility.

**SECTION G. Emission Restriction Summary.**

Source Id	Source Description		
500	EXEMPT EMERGENCY GENERATOR ENGINES		
Emission Limit			Pollutant
3.500	GRAMS/KW-Hr		CO
2.750	Tons/Yr	Ozone season	NOX
6.600	Tons/Yr	12-month rolling basis	NOX
100.000	Lbs/Hr		NOX
1,000.000	Lbs/Day		NOX
6.400	GRAMS/KW-Hr		NOx+NMHC
10.500	GRAMS/KW-Hr		NOx+NMHC
500.000	PPMV	dry basis	SO2
0.200	GRAMS/KW-Hr		TSP
C12	ENCLOSED ULE FLARE 1		
Emission Limit			Pollutant
10.900	Lbs/Hr		CO
47.760	Tons/Yr	12-month rolling basis	CO
1.630	Lbs/Hr		NMOC
7.140	Tons/Yr	12-month rolling basis	NMOC
20.000	PPMV	dry basis	NMOC
4.540	Lbs/Hr		NOX
19.900	Tons/Yr	12-month rolling basis	NOX
18.220	Lbs/Hr		SO2
79.810	Tons/Yr	12-month rolling basis	SO2
0.020	gr/DRY FT3		TSP
2.700	Lbs/Hr		TSP
11.830	Tons/Yr	12-month rolling basis	TSP
C13	ENCLOSED ULE FLARE 2		
Emission Limit			Pollutant
10.900	Lbs/Hr		CO
47.760	Tons/Yr	12-month rolling basis	CO
1.630	Lbs/Hr		NMOC
7.140	Tons/Yr	12-month rolling basis	NMOC
20.000	PPMV	dry basis	NMOC
4.540	Lbs/Hr		NOX
19.900	Tons/Yr	12-month rolling basis	NOX
18.220	Lbs/Hr		SO2
79.810	Tons/Yr	12-month rolling basis	SO2
0.020	gr/DRY FT3		TSP
2.700	Lbs/Hr		TSP
11.830	Tons/Yr	12-month rolling basis	TSP
C14	ENCLOSED ULE FLARE 3		
Emission Limit			Pollutant
10.900	Lbs/Hr		CO
47.760	Tons/Yr	12-month rolling basis	CO

**SECTION G. Emission Restriction Summary.**

Source Id	Source Description	
1.630	Lbs/Hr	NMOC
7.140	Tons/Yr	12-month rolling basis NMOC
20.000	PPMV	dry basis NMOC
4.540	Lbs/Hr	NOX
19.900	Tons/Yr	12-month rolling basis NOX
18.220	Lbs/Hr	SO2
79.810	Tons/Yr	12-month rolling basis SO2
0.020	gr/DRY FT3	TSP
2.700	Lbs/Hr	TSP
11.830	Tons/Yr	12-month rolling basis TSP

Site Emission Restriction Summary

Emission Limit	Pollutant
65.350 Tons/Yr	12-month rolling basis NOX
143.550 Tons/Yr	12-month rolling basis CO
239.540 Tons/Yr	12-month rolling basis SO2
21.550 Tons/Yr	12-month rolling basis VOC
100.000 Tons/Yr	12-month rolling basis PM10
100.000 Tons/Yr	12-month rolling basis PM2.5



SECTION H. Miscellaneous.



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



TAB 5

Permit Modifications



Pennsylvania
Department of Environmental Protection

March 27, 2025

VIA E-MAIL: BBolvin@wm.com

Mr. Brian P. Bolvin, P.E.
Site Engineer
Waste Management of Fairless, LLC
1000 New Ford Mill Road
Morrisville, PA 19067

Re: Minor Permit Modification
Fairless Landfill
Permit ID No. 101699
APS ID No. 688905, AUTH ID No. 1519146
Falls Township
Bucks County

Dear Mr. Bolvin:

The Pennsylvania Department of Environmental Protection (DEP) has reviewed the minor permit modification application received on March 10, 2025, requesting DEP's approval for the construction of a portion of the lined area in Cell 13 of the approved Fairless Landfill according to an intermediate grading plan that will allow waste disposal operations to be commenced prior to full development of Cell 13. The Fairless Landfill is an active municipal waste landfill located in Falls Township, Bucks County. We have determined that you have satisfied all applicable requirements necessary to perform these activities. Therefore, we have issued the enclosed permit in accordance with Article V of the Solid Waste Management Act, 35 P.S. §§ 6018.101 et seq.

Compliance with the limitations and stipulations that have been set forth in your permit is mandatory.

Any person aggrieved by this action may appeal the action to the Environmental Hearing Board (Board) pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. § 7514, and the Administrative Agency Law, 2 Pa. C.S. Chapter 5A. The Board's address is:

Environmental Hearing Board
Rachel Carson State Office Building, Second Floor
400 Market Street
P.O. Box 8457
Harrisburg, PA 17105-8457

TDD users may contact the Board through the Pennsylvania Relay Service, 800.654.5984.

Appeals must be filed with the Board within 30 days of receipt of notice of this action unless the appropriate statute provides a different time. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

A Notice of Appeal form and the Board's rules of practice and procedure may be obtained online at www.chb.pa.gov or by contacting the Secretary to the Board at 717.787.3483. The Notice of Appeal form and the Board's rules are also available in braille and on audiotape from the Secretary to the Board.

IMPORTANT LEGAL RIGHTS ARE AT STAKE. YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD AT 717.787.3483 FOR MORE INFORMATION. YOU DO NOT NEED A LAWYER TO FILE A NOTICE OF APPEAL WITH THE BOARD.

IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST BE FILED WITH AND RECEIVED BY THE BOARD WITHIN 30 DAYS OF RECEIPT OF NOTICE OF THIS ACTION.

If you have any questions about the enclosed permit or requirements of the Solid Waste Management Act, please contact Dr. Mohamad Mazid, P.E., Chief, Technical Services, by e-mail mmazid@pa.gov or telephone at 484.250.5768.

Thank you for your cooperation.

Sincerely,



Shawn Mountain
Environmental Program Manager
Waste Management

Enclosure: Permit Modification

cc: Mr. Takita – Falls Township (w/enclosure)
Ms. Kostick – Bucks County Health Department (w/enclosure)
Mr. Kurowski – Waste Management of Fairless, LLC
Mr. Whitty, P.E. – WSP USA Inc.
Dr. Mazid, P.E.
Mr. Bower
Mr. K. Bauer
Mr. Mountain
Re30 (GJS25WM)85-1a

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

FORM NO. 13-A

MODIFICATION TO SOLID WASTE DISPOSAL AND/OR PROCESSING PERMIT

Under the provisions of Act 97, the Solid Waste Management Act of July 7, 1980, Solid Waste Permit

Number 101699 issued on (date original permit was issued) March 30, 2016 to

(permittee) Waste Management of Fairless, LLC

(address) 1000 New Ford Mill Road

Morrisville, PA 19067

is hereby modified as follows:

1. This amended Waste Management Permit is issued based upon application No. 101699 (APS No. 688905, AUTH No. 1519146), which was received at the Southeast Regional Office of the Department of Environmental Protection (DEP) on March 10, 2025. This amended waste management permit approves the construction of a portion of the lined area in Cell 13 of the approved Fairless Landfill according to an intermediate grading plan that will allow waste disposal operations to be commenced prior to full development of Cell 13. The Fairless Landfill is an active municipal waste landfill located in Falls Township, Bucks County.

This approved permit application consists of the following documents (unless otherwise noted, 'received' and 'revised' refer to the dates documents were received by DEP and not necessarily the dates of the documents themselves):

General Information Form (GIF), received on March 10, 2025.

Form A - Application for Municipal or Residual Waste Permit, received on March 10, 2025.

Form B - Professional Certification, received on March 10, 2025.

Form B1 - Application Form Certification, received on March 10, 2025.

Form MRW-C - Identification of Interests and Compliance History, received on March 10, 2025.

Form 3 - Map Requirements - Phase II, Municipal Waste and Construction/Demolition Waste Landfills, received on March 10, 2025.

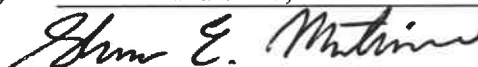
Form 14 - Operation Plan - Phase II, received on March 10, 2025.

Drawing No. 01, "Proposed Cell 13 Intermediate Construction - Top of Subbase", Rev. A, Dated February 10, 2025, received on March 10, 2025.

The contents of all the above-listed documents are hereby incorporated in this permit amendment as conditions with which the Permittee must comply. Where the terms or conditions of this permit amendment differ from the documents incorporated by reference above, the terms or conditions of this amendment shall govern.

2. Nothing in this permit shall be construed to supersede, amend, or authorize violation of, the provisions of any valid and applicable local law, ordinance, or regulation, provided that said

This modification shall be attached to the existing Solid Waste Permit described above and shall become a part thereof effective on (date) March 27, 2025



FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

FORM NO. 13-A

MODIFICATION TO SOLID WASTE DISPOSAL AND/OR PROCESSING PERMIT

Under the provisions of Act 97, the Solid Waste Management Act of July 7, 1980, Solid Waste Permit

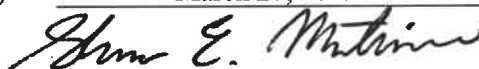
Number 101699 issued on (date original permit was issued) March 30, 2016 to
(permittee) Waste Management of Fairless, LLC
(address) 1000 New Ford Mill Road
Morrisville, PA 19067

is hereby modified as follows:

local law, ordinance, or regulation is not preempted by the Pennsylvania Solid Waste Management Act, the Act of July 7, 1980, Act 97, 35 P.S. 6018.101 et seq.

3. As a condition of this permit and of the Permittee's authority to conduct the activities authorized by this permit, the Permittee hereby authorizes and consents to allow authorized employees or agents of DEP, without advanced notice or a search warrant, upon presentation of appropriate credentials, and without delay, to have access to and to inspect all areas on which solid waste management activities are being or will be conducted. The authorization and consent shall include consent to collect samples of waste, water or gases, to take photographs, to perform measurements, surveys, and other tests, to inspect any monitoring equipment, to inspect the methods of operation, and to inspect and/or copy documents, books, or papers required by DEP to be maintained. This permit condition is referenced in accordance with Sections 608 and 610(7) of the Solid Waste Management Act, 35 P.S. §§ 6018.608 and 6018.610(7). This condition in no way limits any other powers granted under the Solid Waste Management Act.
4. This Minor Permit Modification approval is issued to allow an intermediate grading plan for a portion of the lined disposal area in Cell 13 to be completed and fully contained prior to the full development of the rest of Cell 13 such that waste disposal operations may commence early upon a construction certification (Form 37) as described in the following Permit Condition has been submitted to and accepted by DEP. This early completed portion of Cell 13 shall be constructed in conformance with the "Letter from WSP Dated February 13, 2025, Regarding Intermediate Grading Plan for Cell 13" in Appendix A of Form 14 and Drawing 01 - Proposed Cell 13 Intermediate Construction – Top of Subbase, referenced in Condition No. 1, above.
5. Upon completion of the portion of the lined disposal area in Cell 13 in accordance with the intermediate grading plan, Form 37, Certification of Facility Construction Activity, shall be submitted to the Regional Solid Waste Manager in DEP's Southeast Regional Office for review and approval prior to waste disposal operations be commenced in the completed area.

This modification shall be attached to the existing Solid Waste Permit described above and shall become a part thereof effective on (date) March 27, 2025



FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

FORM NO. 13-A

MODIFICATION TO SOLID WASTE DISPOSAL AND/OR PROCESSING PERMIT

Under the provisions of Act 97, the Solid Waste Management Act of July 7, 1980, Solid Waste Permit

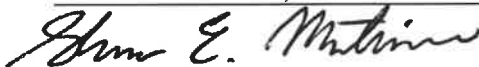
Number 101699 issued on (date original permit was issued) March 30, 2016 to(permittee) Waste Management of Fairless, LLC(address) 1000 New Ford Mill RoadMorrisville, PA 19067

is hereby modified as follows:

6. Except as expressly described herein, no other changes to the facility's permit are made as a result of this permit modification.

Re 30 (GJS25WM)85-1

This modification shall be attached to the existing Solid Waste Permit described above and shall become a part thereof effective on (date) March 27, 2025



FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION



**Pennsylvania
Department of Environmental Protection**

March 5, 2025

VIA E-MAIL: BBolvin@wm.com

Mr. Brian P. Bolvin, P.E.
Waste Management of Fairless, LLC
1000 New Ford Mill Road
Morrisville, PA 19067

Re: Minor Permit Modification
Fairless Landfill
Permit ID No. 101699
APS ID No. 688905, AUTH ID No. 1490529
Falls Township
Bucks County

Dear Mr. Bolvin:

The Pennsylvania Department of Environmental Protection (DEP) has reviewed your minor permit modification application received on June 27, 2024, requesting DEP's approval for using propane to augment the Ultra Low Emission (ULE) flare operations only when landfill gas from the GROWS Landfill is directed to the ULE flare system which is within the permit boundary of the Waste Management's Fairless Landfill. Additional information was received on March 3, 2025. The Fairless Landfill is an active municipal waste landfill located in Falls Township, Bucks County. We have determined that you have satisfied all applicable requirements necessary to perform these activities. Therefore, we have issued the enclosed permit in accordance with Article V of the Solid Waste Management Act, 35 P.S. Sections 6018.101 et seq.

Compliance with the limitations and stipulations that have been set forth in your permit is mandatory.

Any person aggrieved by this action may appeal the action to the Environmental Hearing Board (Board) pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. § 7514, and the Administrative Agency Law, 2 Pa. C.S. Chapter 5A. The Board's address is:

Environmental Hearing Board
Rachel Carson State Office Building, Second Floor
400 Market Street
P.O. Box 8457
Harrisburg, PA 17105-8457

TDD users may contact the Board through the Pennsylvania Relay Service, 800.654.5984.

Appeals must be filed with the Board within 30 days of receipt of notice of this action unless the appropriate statute provides a different time. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

A Notice of Appeal form and the Board's rules of practice and procedure may be obtained online at www.ehb.pa.gov or by contacting the Secretary to the Board at 717.787.3483. The Notice of Appeal form and the Board's rules are also available in braille and on audiotape from the Secretary to the Board.

IMPORTANT LEGAL RIGHTS ARE AT STAKE. YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD AT 717.787.3483 FOR MORE INFORMATION. YOU DO NOT NEED A LAWYER TO FILE A NOTICE OF APPEAL WITH THE BOARD.

IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST BE FILED WITH AND RECEIVED BY THE BOARD WITHIN 30 DAYS OF RECEIPT OF NOTICE OF THIS ACTION.

If you have any questions about the enclosed permit or requirements of the Solid Waste Management Act, please contact Dr. Mohamad Mazid, P.E., Chief, Technical Services, by e-mail mmazid@pa.gov or telephone at 484.250.5768.

Thank you for your cooperation.

Sincerely,



Shawn Mountain
Environmental Program Manager
Waste Management

Enclosure: Permit Modification

cc: Mr. Takita – Falls Township (w/enclosure)
Ms. Kostick – Bucks County Health Department (w/enclosure)
Ms. Taylor, P.E. – Earthres Group, Inc. (w/enclosure)
Dr. Mazid, P.E. (w/enclosure)
Mr. K Bauer (w/enclosure)
Mr. Bower (w/enclosure)
Dr. Ou, P.E. (w/enclosure)
Re 30 (hmw25wm) 65-6

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

FORM NO. 13-A

MODIFICATION TO SOLID WASTE DISPOSAL AND/OR PROCESSING PERMIT

Under the provisions of Act 97, the Solid Waste Management Act of July 7, 1980, Solid Waste Permit

Number 101699 issued on (date original permit was issued) March 30, 2016 to
(permittee) Waste Management of Fairless, LLC
(address) 1000 New Ford Mill Road
Morrisville, PA 19067

is hereby modified as follows:

1. This amended Waste Management Permit is issued based upon application No. 101699 (APS No. 688905, AUTH No. 14690529), which was received at the Southeast Regional Office of the Department of Environmental Protection (DEP) on June 27, 2024, additional information was received on March 3, 2025. This amended waste management permit approves the use of propane to augment the Ultra Low Emission (ULE) flares operation only when landfill gas from the GROWS Landfill is directed to the ULE flares system that is within the permit boundary of the Waste Management's Fairless Landfill. The Fairless Landfill is an active municipal waste landfill located in Falls Township, Bucks County.

This approved permit application consists of the following documents (unless otherwise noted, 'received' and 'revised' refer to the dates documents were received by DEP and not necessarily the dates of the documents themselves):

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Form A - Application for Municipal or Residual Waste Permit, received on June 27, 2024.

Form B - Professional Certification, received on June 27, 2024.

Form B1 - Application Form Certification, received on June 27, 2024.

Form MRW-C - Identification of Interests and Compliance History, received on June 27, 2024.

Form G (B) - Air Resources Protection NMOC Emissions Estimate and Control Plan,
received on June 27, 2024.

Form K, Gas Management, received on June 27, 2024.

Form L, Contingency Plan for Emergency Procedures w/Preparedness, Prevention, and
Contingency Plan (PPC Plan) (rev. 8, dated June 2024), received on June 27, 2024.

Form 5 - Map Requirements, Transfer Facilities/Composting Facilities/Resource Recovery and
Other Processing Facilities, received on June 27, 2024.

Drawing No. M-01, "Site Plan - GROWS Propane Line Installation", dated 02/02/24, received
on June 27, 2024.

Drawing No. M-03, "Propane Line Installation, Mechanical Design, Isometric View", dated
02/02/24, received on June 27, 2024.

This modification shall be attached to the existing Solid Waste Permit described above and shall become
a part thereof effective on (date) March 5, 2025


FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

FORM NO. 13-A

MODIFICATION TO SOLID WASTE DISPOSAL AND/OR PROCESSING PERMIT

Under the provisions of Act 97, the Solid Waste Management Act of July 7, 1980, Solid Waste Permit

Number 101699 issued on (date original permit was issued) March 30, 2016 to
(permittee) Waste Management of Fairless, LLC
(address) 1000 New Ford Mill Road
Morrisville, PA 19067

is hereby modified as follows:

Drawing No. D-02, "Propane Piping Design, Process & Instrumentation, Propane to Flare (Typ. 3) - GROWS Propane Line Installation", dated 02/02/24, received on June 27, 2024.

Drawing No. D-03, "Propane Piping Design, Process & Instrumentation, Propane to Flare Headers - GROWS Propane Line Installation", dated 02/02/24, received on June 27, 2024.

The contents of all the above-listed documents are hereby incorporated in this permit amendment as conditions with which the Permittee must comply. Where the terms or conditions of this permit amendment differ from the documents incorporated by reference above, the terms or conditions of this amendment shall govern.

2. Nothing in this permit shall be construed to supersede, amend, or authorize violation of, the provisions of any valid and applicable local law, ordinance, or regulation, provided that said local law, ordinance, or regulation is not preempted by the Pennsylvania Solid Waste Management Act, the Act of July 7, 1980, Act 97, 35 P.S. 6018.101 et seq.
3. As a condition of this permit and of the Permittee's authority to conduct the activities authorized by this permit, the Permittee hereby authorizes and consents to allow authorized employees or agents of DEP, without advanced notice or a search warrant, upon presentation of appropriate credentials, and without delay, to have access to and to inspect all areas on which solid waste management activities are being or will be conducted. The authorization and consent shall include consent to collect samples of waste, water or gases, to take photographs, to perform measurements, surveys, and other tests, to inspect any monitoring equipment, to inspect the methods of operation, and to inspect and/or copy documents, books, or papers required by DEP to be maintained. This permit condition is referenced in accordance with Sections 608 and 610(7) of the Solid Waste Management Act, 35 P.S. Sections 6018.608 and 6018.610(7). This condition in no way limits any other powers granted under the Solid Waste Management Act.

This modification shall be attached to the existing Solid Waste Permit described above and shall become a part thereof effective on (date) March 5, 2025


FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

FORM NO. 13-A

MODIFICATION TO SOLID WASTE DISPOSAL AND/OR PROCESSING PERMIT

Under the provisions of Act 97, the Solid Waste Management Act of July 7, 1980, Solid Waste Permit

Number 101699 issued on (date original permit was issued) March 30, 2016 to
(permittee) Waste Management of Fairless, LLC
(address) 1000 New Ford Mill Road
Morrisville, PA 19067

is hereby modified as follows:

4. This Minor Permit Modification approval is issued to supplement ULE flare operations with propane, in order to overcome unstable operations of GROWS' landfill gas (LFG) due to its low heat rate conditions. Up to 275 standard cubic feet per minute (scfm) of propane will be needed to stabilize ULE system operations for GROWS' LFG. Propane will be supplied by a double-walled aboveground storage tank of 30,000-gallon capacity and transmitted via a vaporizer unit, both will be located adjacent to the ULE flares and within the permitted area of the facility. Propane usage will be measured, recorded and reported in accordance with reporting requirements by DEP's Air Quality Program, as well as in annual operation reports under this Solid Waste Permit No. 101699 and/or General Permit WMGM055SE001.
5. A Form 37, Certification of Facility Construction Activity, shall be submitted to the Regional Solid Waste Manager in DEP's Southeast Regional Office for review and approval upon completion of the propane augmentation system, prior to its use for GROWS's LFG at the ULE system operations.
6. Except as expressly described herein, no other changes to the facility's permit are made as a result of this permit modification.

Re 30 (hwm25wm) 63-5

This modification shall be attached to the existing Solid Waste Permit described above and shall become a part thereof effective on (date) March 5, 2025



FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION



Pennsylvania
Department of Environmental Protection

March 27, 2025

VIA E-MAIL: BBolvin@wm.com

Mr. Brian P. Bolvin, P.E.
Site Engineer
Waste Management of Fairless, LLC
1000 New Ford Mill Road
Morrisville, PA 19067

Re: Minor Permit Modification
Fairless Landfill
Permit ID No. 101699
APS ID No. 688905, AUTH ID No. 1517526
Falls Township
Bucks County

Dear Mr. Bolvin:

The Pennsylvania Department of Environmental Protection (DEP) has reviewed the minor permit modification application, which was received on February 7, 2025, requesting DEP's approval for the installation and operation of a coalescing filter at the Ultra Low Emission (ULE) flare complex located at the Fairless Landfill to treat landfill gas generated at GROWS Landfill that is directed to ULE flare complex. The Fairless Landfill is an active municipal waste landfill located in Falls Township, Bucks County. We have determined that you have satisfied all applicable requirements necessary to perform these activities. Therefore, we have issued the enclosed permit in accordance with Article V of the Solid Waste Management Act, 35 P.S. §§ 6018.101 et seq.

Compliance with the limitations and stipulations that have been set forth in your permit is mandatory.

Any person aggrieved by this action may appeal the action to the Environmental Hearing Board (Board) pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. § 7514, and the Administrative Agency Law, 2 Pa. C.S. Chapter 5A. The Board's address is:

Environmental Hearing Board
Rachel Carson State Office Building, Second Floor
400 Market Street
P.O. Box 8457
Harrisburg, PA 17105-8457

TDD users may contact the Board through the Pennsylvania Relay Service, 800.654.5984.

Appeals must be filed with the Board within 30 days of receipt of notice of this action unless the appropriate statute provides a different time. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

A Notice of Appeal form and the Board's rules of practice and procedure may be obtained online at www.ehb.pa.gov or by contacting the Secretary to the Board at 717.787.3483. The Notice of Appeal form and the Board's rules are also available in braille and on audiotape from the Secretary to the Board.

IMPORTANT LEGAL RIGHTS ARE AT STAKE. YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD AT 717.787.3483 FOR MORE INFORMATION. YOU DO NOT NEED A LAWYER TO FILE A NOTICE OF APPEAL WITH THE BOARD.

IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST BE FILED WITH AND RECEIVED BY THE BOARD WITHIN 30 DAYS OF RECEIPT OF NOTICE OF THIS ACTION.

If you have any questions about the enclosed permit or requirements of the Solid Waste Management Act, please contact Dr. Mohamad Mazid, P.E., Chief, Technical Services, by e-mail mmazid@pa.gov or telephone at 484.250.5768.

Thank you for your cooperation.

Sincerely,



Shawn Mountain
Environmental Program Manager
Waste Management

Enclosure: Permit Modification

cc: Mr. Takita – Falls Township (w/enclosure)
Ms. Kostick – Bucks County Health Department (w/enclosure)
Mr. Bolton – WM Environmental Legacy Management Group
Ms. Taylor, P.E. – Earthres Group, Inc.
Dr. Mazid, P.E.
Mr. Bower
Mr. K. Bauer
Mr. Mountain
Re30 (GJS25WM)85-2a

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

FORM NO. 13-A

MODIFICATION TO SOLID WASTE DISPOSAL AND/OR PROCESSING PERMIT

Under the provisions of Act 97, the Solid Waste Management Act of July 7, 1980, Solid Waste Permit

Number 101699 issued on (date original permit was issued) March 30, 2016 to
(permittee) Waste Management of Fairless, LLC
(address) 1000 New Ford Mill Road
Morrisville, PA 19067

is hereby modified as follows:

1. This amended Waste Management Permit is issued based upon application No. 101699 (APS No. 688905, AUTH No. 1517526), which was received at the Southeast Regional Office of the Department of Environmental Protection (DEP) on February 7, 2025. This amended waste management permit approves the installation and operation of a coalescing filter at the Ultra Low Emission (ULE) flare complex located at the Fairless Landfill to treat landfill gas (LFG) generated at GROWS Landfill that is directed to ULE flare complex. The Fairless Landfill is an active municipal waste landfill located in Falls Township, Bucks County.

This approved permit application consists of the following documents (unless otherwise noted, 'received' and 'revised' refer to the dates documents were received by DEP and not necessarily the dates of the documents themselves):

General Information Form (GIF), received on February 7, 2025.

Form A - Application for Municipal or Residual Waste Permit, received on February 7, 2025.

Form B - Professional Certification, received on February 7, 2025.

Form B1 - Application Form Certification, received on February 7, 2025.

Form MRW-C - Identification of Interests and Compliance History, received on February 7, 2025.

Form K - Gas Management, received on February 7, 2025.

Form L - Contingency Plan for Emergency Procedures w/Preparedness, Prevention, and Contingency Plan (PPC Plan) (Rev. 9, dated February 2025), received on February 7, 2025.

Form 5 - Map Requirements, Transfer Facilities/Composting Facilities/Resource Recovery and Other Processing Facilities, received on February 7, 2025.

Drawing No. M-100, "Mechanical Notes, GROWS Landfill", Prepared by SCS Energy, Rev. 0, Dated March 22, 2024, received on February 7, 2025.

Drawing No. M-200, "Piping Plan, Sheet 1, GROWS Landfill", Prepared by SCS Energy, Rev. 1, Dated August 14, 2024, received on February 7, 2025.

Drawing No. M-210, "Piping Isometric Condensate System, GROWS Landfill", Prepared by SCS Energy, Rev. 0, Dated March 22, 2024, received on February 7, 2025.

This modification shall be attached to the existing Solid Waste Permit described above and shall become a part thereof effective on (date) March 27, 2025


FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

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MODIFICATION TO SOLID WASTE DISPOSAL AND/OR PROCESSING PERMIT

Under the provisions of Act 97, the Solid Waste Management Act of July 7, 1980, Solid Waste Permit

Number 101699 issued on (date original permit was issued) March 30, 2016 to
(permittee) Waste Management of Fairless, LLC
(address) 1000 New Ford Mill Road
Morrisville, PA 19067

is hereby modified as follows:

- Drawing No. M-700, "Miscellaneous Pipe Support Location Plan, GROWS Landfill", Prepared by SCS Energy, Rev. 1, Dated August 14, 2024, received on February 7, 2025.
- Drawing No. M-701, "Miscellaneous Pipe Supports Sheet 1, GROWS Landfill", Prepared by SCS Energy, Rev. 0, Dated March 22, 2024, received on February 7, 2025.
- Drawing No. M-702, "Miscellaneous Pipe Supports Sheet 2, GROWS Landfill", Prepared by SCS Energy, Rev. 1, Dated August 14, 2024, received on February 7, 2025.
- Drawing No. S-100, "Structural Notes, GROWS Landfill", Prepared by SCS Energy, Rev. 0, Dated March 22, 2024, received on February 7, 2025.
- Drawing No. S-200, "Structural Details, GROWS Landfill", Prepared by SCS Energy, Rev. 0, Dated March 22, 2024, received on February 7, 2025.
- Drawing No. x, "14"-LFG-001-HD2, GROWS Landfill", Prepared by SCS Energy, Rev. 0, Dated March 22, 2024, received on February 7, 2025.
- Drawing No. x, "14"-LFG-002-HD2, GROWS Landfill", Prepared by SCS Energy, Rev. 1, Dated August 14, 24, received on February 7, 2025.
- Drawing No. x, "14"-LFG-003-HD2, GROWS Landfill", Prepared by SCS Energy, Rev. 1, Dated August 14, 2024, received on February 7, 2025.
- Drawing No. x, "4"-LFG-401-SS1, GROWS Landfill", Prepared by SCS Energy, Rev. 0, Dated March 21, 2024, received on February 7, 2025.
- Drawing No. x, "6"-LFG-402-CS1, GROWS Landfill", Prepared by SCS Energy, Rev. 0, Dated March 21, 2024, received on February 7, 2025.
- Drawing No. x, "6"-LFG-402-CS1, GROWS Landfill", Prepared by SCS Energy, Rev. 0, Dated March 21, 2024, received on February 7, 2025.

The contents of all the above-listed documents are hereby incorporated in this permit amendment as conditions with which the Permittee must comply. Where the terms or conditions of this permit amendment differ from the documents incorporated by reference above, the terms or conditions of this amendment shall govern.

2. Nothing in this permit shall be construed to supersede, amend, or authorize violation of, the provisions of any valid and applicable local law, ordinance, or regulation, provided that said

This modification shall be attached to the existing Solid Waste Permit described above and shall become a part thereof effective on (date) March 27, 2025



FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

FORM NO. 13-A

MODIFICATION TO SOLID WASTE DISPOSAL AND/OR PROCESSING PERMIT

Under the provisions of Act 97, the Solid Waste Management Act of July 7, 1980, Solid Waste Permit

Number 101699 issued on (date original permit was issued) March 30, 2016 to(permittee) Waste Management of Fairless, LLC(address) 1000 New Ford Mill RoadMorrisville, PA 19067

is hereby modified as follows:

local law, ordinance, or regulation is not preempted by the Pennsylvania Solid Waste Management Act, the Act of July 7, 1980, Act 97, 35 P.S. 6018.101 et seq.

3. As a condition of this permit and of the Permittee's authority to conduct the activities authorized by this permit, the Permittee hereby authorizes and consents to allow authorized employees or agents of DEP, without advanced notice or a search warrant, upon presentation of appropriate credentials, and without delay, to have access to and to inspect all areas on which solid waste management activities are being or will be conducted. The authorization and consent shall include consent to collect samples of waste, water or gases, to take photographs, to perform measurements, surveys, and other tests, to inspect any monitoring equipment, to inspect the methods of operation, and to inspect and/or copy documents, books, or papers required by DEP to be maintained. This permit condition is referenced in accordance with Sections 608 and 610(7) of the Solid Waste Management Act, 35 P.S. §§ 6018.608 and 6018.610(7). This condition in no way limits any other powers granted under the Solid Waste Management Act.
4. This Minor Permit Modification approval is issued to allow the installation and operation of a coalescing filter to remove oil droplets suspended within the GROWS Landfill LFG stream that will improve the quality of the GROWS Landfill LFG going to the ULE flares and minimize downtime for maintenance. The coalescing filter shall be installed and operated in conformance with the Form K - Gas Management and drawings referenced in Condition No. 1, above.
5. Upon completion of the installation of the coalescing filter in accordance with the design described in this permit modification application, Form 37, Certification of Facility Construction Activity, shall be submitted to the Regional Solid Waste Manager in DEP's Southeast Regional Office for review and approval prior to the GROWS Landfill LFG going to the ULE flares.
6. Except as expressly described herein, no other changes to the facility's permit are made as a result of this permit modification.

Re 30 (GJS25WM)85-2

This modification shall be attached to the existing Solid Waste Permit described above and shall become a part thereof effective on (date) March 27, 2025



FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION