



**Maryland**  
Department of  
the Environment

**Wes Moore, Governor**  
**Aruna Miller, Lt. Governor**

**Serena McIlwain, Secretary**  
**Suzanne E. Dorsey, Deputy Secretary**  
**Adam Ortiz, Deputy Secretary**

Mr. David Candy, Superintendent  
Solid Waste Division  
Worcester County Department of Public Works  
6113 Timmons Road  
Snow Hill, MD 21863

APR 17 2025

Dear Mr. Candy:

Enclosed, please find your Permit to Construct for the installation of one (1) horizontal grinder powered by a 755 horsepower diesel engine to be located at 7091 Central Site Lane, Newark, MD 21841. The permit contains both general conditions, which apply to all air quality permit holders in Maryland, and specific conditions, which apply to the engines powering the horizontal grinder that you have proposed to install/construct.

The addition of the one (1) grinder powered by a diesel engine qualifies as an "Off-Permit" change to the facility's Part 70 operating permit. The Department recognizes the permit to construct application as written notification of the proposed change. Please include the grinder powered by a diesel engine in the application for the next renewal of the Part 70 permit.

If you have any questions regarding the issuance of this permit, please contact Mr. Nischal Subedi at (410) 537-3372.

Sincerely,

A handwritten signature in black ink, appearing to read "Suna Yi Sariscak".

Suna Yi Sariscak, Manager  
Air Quality Permits Program  
Air & Radiation Administration

SYS/jm

Enclosure

1000

Wes Moore  
Governor

Serena Mclwain  
Secretary

*State of*



*Maryland*

**DEPARTMENT OF THE ENVIRONMENT**

Air and Radiation Administration  
1800 Washington Boulevard, Suite 720  
Baltimore, MD 21230

Construction Permit

Operating Permit

PERMIT NO. As Listed on Page 2

DATE ISSUED APR 17 25

PERMIT FEE \$500.00 (Paid)

EXPIRATION DATE To be paid in accordance with COMAR 26.11.02.04B

**LEGAL OWNER & ADDRESS**

Worcester County Department of Public Works  
6113 Timmons Road  
Snow Hill, MD 21863  
Attn: Mr. David Candy, Superintendent  
Solid Waste Division

**SITE**

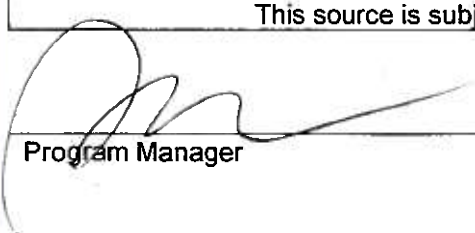
Worcester County Central Municipal Landfill  
7091 Central Site Lane  
Newark, MD 21841  
Premises #047-0112  
AI # 19217

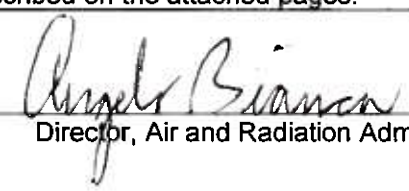
**SOURCE DESCRIPTION**

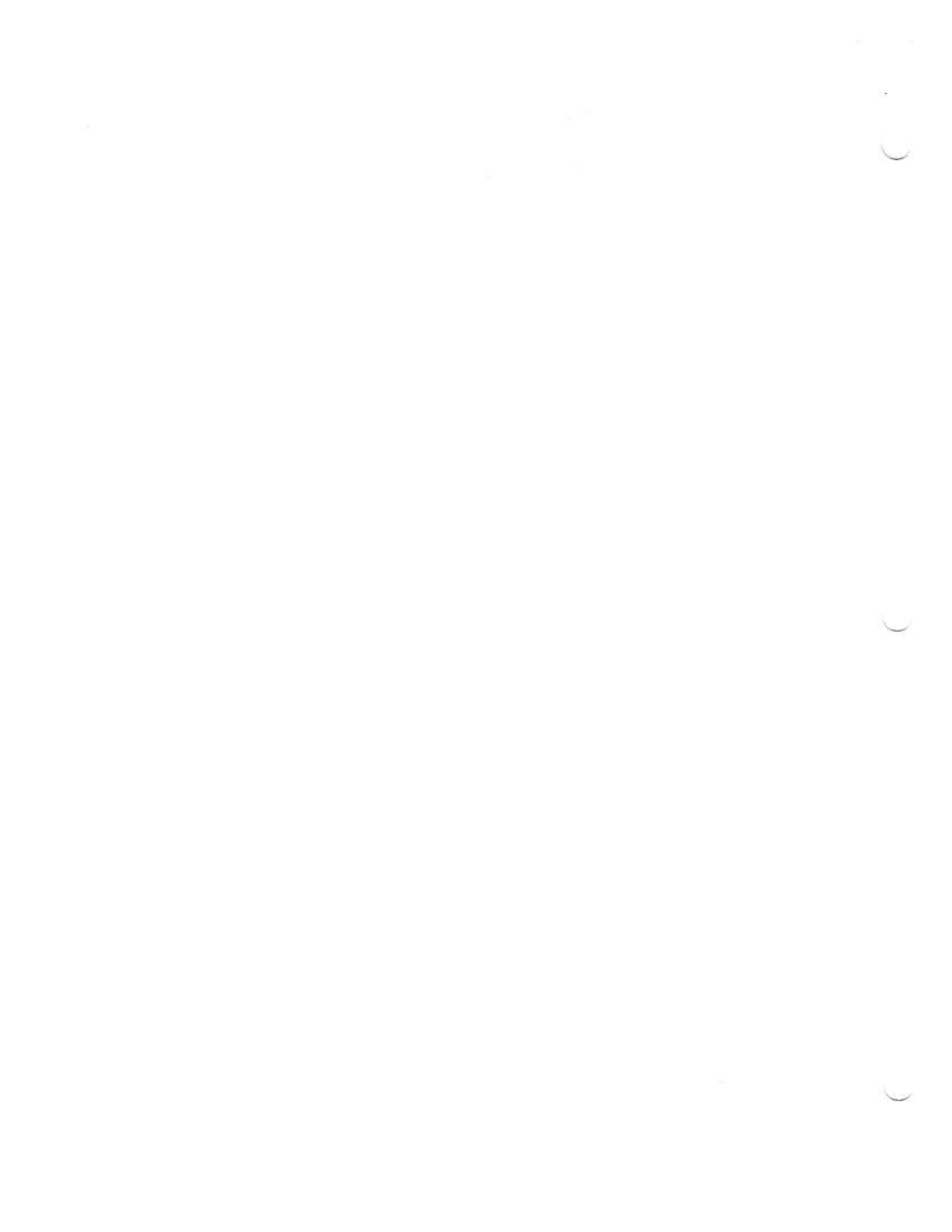
This permit authorizes the installation of one (1) horizontal grinder, Peterson 2710, powered by a 755 Hp Cat C18 diesel-fired internal combustion engine.

This source is subject to the conditions described on the attached pages.

Page 1 of 6

  
Program Manager

  
Director, Air and Radiation Administration



**WORCESTER COUNTY DEPARTMENT OF PUBLIC WORKS  
PERMIT-TO-CONSTRUCT CONDITIONS  
PERMIT No. 047-0112-9-0116**

**INDEX**

- Part A – General Provisions
- Part B – Applicable Regulations
- Part C – Construction Conditions
- Part D – Operating Conditions
- Part E – Monitoring, Record Keeping and Reporting

**Part A – General Provisions**

- (1) The following Air and Radiation Administration (ARA) permit-to-construct applications and supplemental information are incorporated into this permit by reference:

Application for Internal Combustion Engines (Form 44) received on November 6, 2024 for one (1) horizontal grinder powered by a 755 Hp diesel engine.

If there are any conflicts between representations in this permit and representations in the applications, the representations in the permit shall govern. Estimates of dimensions, volumes, emissions rates, operating rates, feed rates and hours of operation included in the applications do not constitute enforceable numeric limits beyond the extent necessary for compliance with applicable requirements.

- (2) Upon presentation of credentials, representatives of the Maryland Department of the Environment (“MDE” or the “Department”) and the Worcester County Health Department shall at any reasonable time be granted, without delay and without prior notification, access to the Permittee’s property and permitted to:
- (a) inspect any construction authorized by this permit;
  - (b) sample, as necessary to determine compliance with requirements of this permit, any materials stored or processed on-site, any waste materials, and any discharge into the environment;
  - (c) inspect any monitoring equipment required by this permit;
  - (d) review and copy any records, including all documents required to be maintained by this permit, relevant to a determination of compliance with requirements of this permit;
  - (e) obtain any photographic documentation or evidence necessary to determine compliance with the requirements of this permit; and

**WORCESTER COUNTY DEPARTMENT OF PUBLIC WORKS  
PERMIT-TO-CONSTRUCT CONDITIONS  
PERMIT No. 047-0112-9-0116**

- (f) exercise its right of entry through use of an unmanned aircraft system to conduct inspections, collect samples, or make visual observations through photographic or video recordings to determine compliance with the requirements of this permit.
- (3) The Permittee shall notify the Department prior to increasing quantities and/or changing the types of any materials referenced in the application or limited by this permit. If the Department determines that such increases or changes constitute a modification, the Permittee shall obtain a permit-to-construct prior to implementing the modification.
- (4) Nothing in this permit authorizes the violation of any rule or regulation or the creation of a nuisance or air pollution.
- (5) If any provision of this permit is declared by proper authority to be invalid, the remaining provisions of the permit shall remain in effect.
- (6) The addition of the tub grinder powered by a 755 hp diesel engine qualifies as an "Off Permit" change to the facility's Part 70 Operating Permit. The Department recognizes the permit to construct application as written notification of the proposed change and should be included in the application for the next renewal of the Part 70 permit.

**Part B – Applicable Regulations**

- (1) This source is subject to all applicable federal air pollution control requirements including, but not limited to, the following:
  - (a) All COMAR 26.11.02.09A – Sources subject to Permits to Construct and Approval.  
"A person may not construct or modify or cause to be constructed or modified any of the following sources without first obtaining, and having in current effect, the specified permits to construct and approvals: (6) All sources, including installations and air pollution control equipment, except as listed in Regulation.10 of this chapter --- -- permit to construct required."

**FOR ENGINE ONLY**

- (b) COMAR 26.11.09.05E – Visible Emissions Limits for Stationary Internal Combustion Engine Powered Equipment.

**WORCESTER COUNTY DEPARTMENT OF PUBLIC WORKS**  
**PERMIT-TO-CONSTRUCT CONDITIONS**  
**PERMIT No. 047-0112-9-0116**

- (1) "Emissions During Idle Mode. A person may not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity.
- (2) Emissions During Operating Mode. A person may not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity.
- (3) Exceptions.
  - (a) Section E(2) does not apply for a period of 2 consecutive minutes after a period of idling of 15 consecutive minutes for the purpose of clearing the exhaust system.
  - (b) Section E(2) does not apply to emissions resulting directly from cold engine start-up and warm-up for the following maximum periods:
    - (i) Engines that are idled continuously when not in service: 30 minutes;
    - (ii) All other engines: 15 minutes.
  - (c) Section E(2) and (3) does not apply while maintenance, repair, or testing is being performed by qualified mechanics."
- (c) COMAR 26.11.09.07A(1) – Control of Sulfur Oxides from Fuel Burning Equipment.

"A person may not burn, sell, or make available for sale any fuel with a sulfur content by weight in excess of or which otherwise exceeds the following limitations:

  - (c) Distillate fuel oils, 0.3 percent;"
- (2) This source is subject to all applicable State-only enforceable air pollution control requirements including, but not limited to, the following regulations:
  - (a) COMAR 26.11.06.08 – Nuisance.

"An installation or premises may not be operated or maintained in such a manner that a nuisance or air pollution is created. Nothing in this regulation relating to the control of emissions may in any manner be construed as authorizing or permitting the creation of, or maintenance of, nuisance or air pollution."
  - (b) COMAR 26.11.06.09 – Odors.

**WORCESTER COUNTY DEPARTMENT OF PUBLIC WORKS  
PERMIT-TO-CONSTRUCT CONDITIONS  
PERMIT No. 047-0112-9-0116**

"A person may not cause or permit the discharge into the atmosphere of gases, vapors, or odors beyond the property line in such a manner that a nuisance or air pollution is created.

**Part C – Construction Conditions**

Except as otherwise provided in this part, the horizontal grinder with engine shall be constructed in accordance with specifications included in the incorporated applications.

**Part D – Operating Conditions**

- (1) Except as otherwise provided in this part, the horizontal grinder with engine shall be operated in accordance with specifications included in the application, and any operating procedures recommended by equipment vendors unless the Department provides written approval for alternative operating procedures.
- (2) The engine shall be a nonroad engine, as defined in 40 CFR, §1068.30, unless the Permittee complies with the stationary engine requirements of 40 CFR 60, Subpart IIII or Subpart JJJJ and 40 CFR 63, Subpart ZZZZ, as applicable, for the engine.
- (3) The Permittee shall only burn diesel fuel in the engine associated with the horizontal grinder unless the Permittee applies for and receives an approval or permit from the Department to burn an alternative fuel.
- (4) The Permittee shall properly operate and maintain the engine associated with the horizontal grinder in a manner to prevent visible emissions.

**Part E – Monitoring, Record Keeping and Reporting**

- (1) The Permittee shall maintain for at least five (5) years, and shall make available to the Department upon request, records of the following information:
  - (a) Operating hours for the engine powering the horizontal grinder.
  - (b) The Permittee shall report the amount of fuel oil combusted and engine operating hours as part of the annual emission certification.
  - (c) Fuel supplier certification or other fuel analyses showing the sulfur content of the fuel used in the engine.

**WORCESTER COUNTY DEPARTMENT OF PUBLIC WORKS  
PERMIT-TO-CONSTRUCT CONDITIONS  
PERMIT No. 047-0112-9-0116**

- (2) The Permittee shall report, in accordance with requirements under COMAR 26.11.01.07, occurrences of excess emissions to the Compliance Program of the Air and Radiation Administration.





**Maryland**  
Department of  
the Environment

Wes Moore, Governor  
Aruna Miller, Lt. Governor

Serena McIlwain, Secretary  
Suzanne E. Dorsey, Deputy Secretary

Mr. Dallas Baker, Jr. Director  
Department of Public Works  
Worcester County  
6113 Timmons Road  
Snow Hill, MD 21863

RECEIVED  
8/21/2023

AUG 01 2023

Dear Mr. Baker:

Re: Renewal Part 70/ Title V Operating Permit #24-047-0112

Enclosed, please find the renewal Part 70/Title V Operating Permit and Fact Sheet for the Worcester County Central Landfill located in Newark, MD. The Permit will expire on September 30, 2027.

The Code of Maryland Regulations (COMAR) 26.11.03.11 states the following:

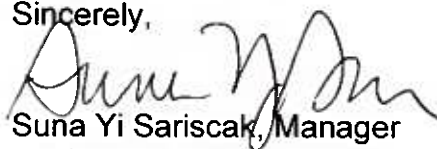
If the Department denies a Part 70 permit or issues it with terms and conditions that are objectionable to the applicant, the applicant may request that a contested case hearing be held regarding the permit. This request shall be made to the Department in writing not later than 15 days after the applicant receives notice that the permit has been denied or of the objectionable terms and conditions. The request shall include the basis for the request and refer to any objectionable terms and conditions.

Please note the following revised condition in the Permit under Section II, General Conditions, Number 5, Permit Renewal:

The Permittee shall submit to the Department a completed application for renewal of this Part 70 permit 12 months before the expiration of the permit. Upon submitting a complete application, the Permittee may continue to operate this facility pending final action by the Department on the renewal.

If you have any questions, please feel free to contact Mr. Mario Cora, , Chief, Combustion and Metallurgical Division, at [mario.cora@maryland.gov](mailto:mario.cora@maryland.gov), or (410) 537-3230.

Sincerely,

  
Suna Yi Sariscak, Manager  
Air Quality Permits Program  
Air & Radiation Administration

SYS/jm

Enclosures



**PART 70 OPERATING PERMIT 24-047-0112  
WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
FACT SHEET**

**BACKGROUND**

The Worcester County Central Landfill Facility (WCCLF) is a municipal solid waste landfill serving Worcester County, Maryland. The WCCLF is located at 7091 Central Site Lane, off Route 13 in Newark, Maryland and occupies a site of approximately 725 acres. The facility is operated by the Worcester County Department of Public Works. The SIC code for the landfill is 4953.

The design capacity of the CFL is 3.3 million megagrams (3.6 million tons) of MSW. Operation of the CLF began in 1990 with the MSW placement in the first of eight (8) planned cells having begun on March 27, 1990. Cell 1 was filled and operation there ceased in October 1997. Placement of municipal waste in Cell 2 began October 1997 and ceased in October 2002. Placement of municipal waste in Cell 3 began immediately after operations at Cell 2 ceased in October 2002 and ceased in September 2007. Placement of municipal waste in Cell 4 has ceased and the cell now is filled. Cell 5 is currently being filled. During calendar year 2020, the CLF accepted approximately 34,551 tons of MSW.

The WCCLF employs leachate recirculation as a means of leachate pretreatment and to accelerate waste stabilization. Leachate from the operating cell drains by gravity to sumps at each corner of a square cell, and then is automatically pumped from these collection sumps to a 500,000-gallon holding tank. Another 433,000 gallon holding tank is also present and connected if backup storage is needed. A 1,500 gallon tank on flatbed truck is used to draw leachate from this storage tank and to refill recharge wells in the active cell each day.

The facility also maintains a few emissions sources that are listed as insignificant activities due to the seasonal use nature and low emission levels. The facility maintains two (2) emergency generators (EGs): one (1) 6 Hp gasoline powered small portable emergency generator, and one (1) grinder-shredder powered by a 425 Hp diesel (Caterpillar, C-12) engine. The facility also maintains various space heaters for comfort heat, various containers for the storage of fuels and lubricating oils.

The USEPA recently published the "Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills," [40 CFR, Subpart Cf] finalized on August 29, 2016. The WCCLF is subject to the provisions because it is an existing MSW landfill for which construction, reconstruction, or modification was commenced on or before July 17, 2014. Furthermore, a new set of emission guidelines regulations for existing landfills has not been published by the State of Maryland, therefore making the new federal rule applicable.

The most recent Tier 2 testing in March 2017 resulted in a projected non-methane

**PART 70 OPERATING PERMIT 24-047-0112  
WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
FACT SHEET**

organic compounds (NMOC) generation rate of 22.26 Mg/yr NMOC for the year 2021. Furthermore, it is projected that the NMOC generation rates will remain below the 34 Mg/yr threshold under 40 CFR, Subpart Cf. This projection was estimated using the Landfill gas emission model (LandGEM) and the site specific NMOC concentration (232.04 ppm), assuming 220,000 tons of waste for each year between 2017 to 2020. The results showed that the estimated NMOC generation rates are below the threshold that requires the installation of a collection system. However, the facility installed and maintains a gas collection and control system, in which NMOCs are destroyed through burning at the enclosed flare station, owned by the landfill and located within its premises.

A landfill is automatically subject to Part 70 operating permit requirements if it has a design capacity of at least 2.5 million megagrams (2.75 million tons), regardless of whether it is a major stationary source. WCCLF has a design capacity which is greater than the 2.75 million tons threshold, making it subject to the Title V permitting requirements.

EPA promulgated national emission standards for hazardous air pollutants for existing and new municipal solid waste (MSW) landfills [40 CFR Part 63, Subpart AAAA]. WCCLF is subject to these MACT requirements because it is a MSW landfill that has accepted waste since November 8, 1987 and is an area source landfill that has a design capacity equal to or greater than 2.5 million cubic meters that was not permanently closed as of January 16, 2003. WCCLF must comply with the MACT requirements when the facility NMOC emissions exceed 50 Mg/year. Using the Landfill gas emission model (LandGEM) and the site specific (March 2017 test) NMOC concentration (232 ppm), it is shown that the projected NMOC uncontrolled emissions through 2026 will be around 23.15 Mg/yr (LandGEM Model analysis performed by the Permittee on April 20, 2017). However, the NMOCs are collected by a gas collection and control system and destroyed through burning at 1,500-standard cubic feet per minute (scfm) enclosed flare system, with 98 % destruction efficiency. WCCLF received ownership of the flare in May 2014, from Worcester Renewable Energy, LLC (no longer in operation).

The current Title V permit for WCCLF expired on September 30, 2021 and remains in effect. On November 30, 2020 the Department received a Part 70 renewal permit application for Worcester County Central Landfill. An administrative completeness review was conducted and the application was deemed to be complete. The completeness determination letter was sent on December 10, 2020 granting the facility an application shield.

Table 1 following summarizes the actual emissions from Worcester County Central Landfill based on its annual certification reports.

**PART 70 OPERATING PERMIT 24-047-0112  
 WORCESTER COUNTY CENTRAL LANDFILL  
 7091 CENTRAL SITE LANE  
 NEWARK, MARYLAND 21863  
 FACT SHEET**

**Table 1: Actual Emissions**

| Year | NOx (tpy) | SOx (tpyPY) | PM10 (TPY) | CO (TPY) | VOC (TPY) |
|------|-----------|-------------|------------|----------|-----------|
| 2020 | 0.25      | 0.02        | 2.88       | 1.08     | 2.06      |
| 2019 | 0.23      | 0.02        | 2.89       | 1.14     | 2.04      |
| 2018 | 0.31      | 0.03        | 2.89       | 1.75     | 2.04      |
| 2017 | 0.39      | 0.03        | 2.90       | 1.25     | 1.55      |
| 2016 | 0.06      | 0.02        | 2.89       | 1.92     | 0.97      |
| 2015 | 0.06      | 0.02        | 2.89       | 1.92     | 0.96      |

**Table 2: Summary of projected NMOC generation rates\***

| Year | NMOC (Mg/yr) |
|------|--------------|
| 2022 | 23.94        |
| 2023 | 25.54        |
| 2024 | 25.59        |
| 2025 | 24.34        |
| 2026 | 23.15        |

\*NMOC emissions are collected and burned in an enclosed flare.

**CAM Analysis**

Worcester County Central Landfill conducted a Compliance Assurance Monitoring (CAM) analysis for the facility and determined that the facility is not subject to the CAM Rule 40 CFR Subpart 64. CAM is not applicable because the WCCLF is subject to an emissions limitation that was proposed by the EPA administrator after November 15, 1990 pursuant to Sections 111 or 112 of the Clean Air Act (specifically the facility is subject to the Emissions Guidelines for Municipal Solid Waste Landfills- 40 CFR Subpart Cc).

**GREENHOUSE GAS (GHG) EMISSION STATEMENT**

There are no greenhouse gas related Clean Air Act requirements applicable to Worcester County Central Landfill. WCCLF has not triggered Prevention of Significant Deterioration (PSD) requirements for GHG emissions so therefore, there are no applicable GHG Clean Air Act requirements. Worcester County Central Landfill emits the following greenhouse gases (GHGs) related to Clean Air Act

**PART 70 OPERATING PERMIT 24-047-0112  
 WORCESTER COUNTY CENTRAL LANDFILL  
 7091 CENTRAL SITE LANE  
 NEWARK, MARYLAND 21863  
 FACT SHEET**

requirements: carbon dioxide, methane, and nitrous oxide. These GHGs originate from various processes (i.e., waste decomposition and landfill gas fugitives, gas flaring, internal combustion engines, and garage boilers) contained within the facility premises applicable to Worcester County Central Landfill. The facility has not triggered Prevention of Significant Deterioration (PSD) requirements for GHG emissions; therefore, there are no applicable GHG Clean Air Act requirements. Emission certifications reports for the years 2018, 2019, and 2020, showed levels of GHGs at the Worcester County Central Landfill (see Table 3 shown below). The Permittee shall quantify facility wide GHGs emissions and report them in accordance with Section 3 of the Part 70 permit.

The following table summarizes the actual emissions from Worcester County Central Landfill based on its Annual Emission Certification Reports:

**Table 3: Greenhouse Gases Emissions Summary**

| <b>GHG</b>                         | <b>Conversion factor</b> | <b>2018 tpy CO2e</b> | <b>2019 tpy CO2e</b> | <b>2020 tpy CO2e</b> |
|------------------------------------|--------------------------|----------------------|----------------------|----------------------|
| Carbon dioxide, CO <sub>2</sub>    | 1                        | 13,700               | 5,739                | 5,754                |
| Methane, CH <sub>4</sub>           | 25                       | 52,475               | 52,000               | 52,350               |
| Nitrous Oxide, N <sub>2</sub> O    | 298                      |                      |                      |                      |
| <b>Total GHG, CO<sub>2</sub>eq</b> |                          | <b>66,175</b>        | <b>57,739</b>        | <b>58,104</b>        |

**EMISSION UNIT IDENTIFICATION**

The following emission units have been identified at the Worcester County Central Landfill as being subject to the Title V permitting requirements and having applicable requirements (Table 4).

**Table 4: Emission Unit Identification**

| <b>Emissions Unit Number</b> | <b>MDE Registration Number</b> | <b>Emissions Unit Name and Description</b>                          | <b>Date of Registration</b> |
|------------------------------|--------------------------------|---|-----------------------------|
| EU-01                        | 9-0024                         | MSW Landfill consisting of nine (9) cells.                          | 1990                        |
| EU-02                        | None                           | Fugitive dust from the facility haul roads (both paved and unpaved) | 1982                        |
| EU-03                        | 9-0080                         | One (1) 1,500-standard cubic feet per                               | 2008                        |

**PART 70 OPERATING PERMIT 24-047-0112  
 WORCESTER COUNTY CENTRAL LANDFILL  
 7091 CENTRAL SITE LANE  
 NEWARK, MARYLAND 21863  
 FACT SHEET**

|       |        |   |      |
|-------|--------|---|------|
|       |        | minute (scfm) enclosed flare with 98% destruction efficiency.                     |      |
| EU-04 | 9-0102 | One (1) Morbark tub grinder powered by a 540 Hp diesel engine (Caterpillar C-15). | 2015 |

**AN OVERVIEW OF THE PART 70 PERMIT**

Section I of the Part 70 Permit contains a brief description of the facility and an inventory list of the emissions units for which applicable requirements are identified in Section IV of the permit.

Section II of the Part 70 Permit contains the general requirements that relate to administrative permit actions. This section includes the procedures for renewing, amending, reopening, and transferring permits, the relationship to permits to construct and approvals, and the general duty to provide information and to comply with all applicable requirements.

Section III of the Part 70 Permit contains the general requirements for testing, record keeping and reporting; and requirements that affect the facility as a whole, such as open burning, air pollution episodes, particulate matter from construction and demolition activities, asbestos provisions, ozone depleting substance provisions, general conformity, and acid rain permit. This section includes the requirement to report excess emissions and deviations, to submit an annual emissions certification report and an annual compliance certification report, and results of sampling and testing.

Section IV of the Part 70 Permit identifies the emissions standards, emissions limitations, operational limitations, and work practices applicable to each emissions unit located at the facility. For each standard, limitation, and work practice, the permit identifies the basis upon which the Permittee will demonstrate compliance. The basis will include testing, monitoring, record keeping, and reporting requirements. The demonstration may include one or more of these methods.

Section V of the Part 70 Permit contains a list of insignificant activities. These activities emit very small quantities of regulated air pollutants and do not require a permit to construct or registration with the Department. For insignificant activities that are subject to a requirement under the Clean Air Act, the requirement is listed under the activity.

Section VI of the Part 70 Permit contains State-only enforceable requirements.

**PART 70 OPERATING PERMIT 24-047-0112  
WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
FACT SHEET**

Section VI identifies requirements that are not based on the Clean Air Act, but solely on Maryland air pollution regulations. These requirements generally relate to the prevention of nuisances and implementation of Maryland's Air Toxics Program.

**REGULATORY AND TECHNICAL REVIEW/COMPLIANCE METHODOLOGY**

**Emission Unit: EU-01      Table IV-1**

**EU01** – MSW Landfill consists of nine (9) cells. Cell 1, Cell 2, Cell 3 and Cell 4 have been filled. Cell 5 is currently being filled. Landfill is provided with a gas collection and control system and gas is destroyed through burning at the enclosed flare station, now owned by the landfill and located within its premises. **[9-0024]**

Note: The most recent Tier 2 testing in March 2017 resulted in a projected non-methane organic compounds (NMOC) generation rate of 22.26 Mg/yr NMOC for the year 2021. Furthermore, it is projected that the NMOC generation rates will remain below the 34 Mg/yr threshold under 40 CFR, Subpart Cf. This projection was estimated using the Landfill gas emission model (LandGEM) and the site specific NMOC concentration (232.04 ppm), assuming 220,000 tons of waste for each year between 2017 to 2020. The results showed that the estimated NMOC generation rates are below the threshold that requires the installation of a collection system. However, the facility installed and maintains a gas collection and control system, in which NMOCs are destroyed through burning at the enclosed flare station, owned by the landfill and located within its premises.

**Applicable Standards and Limits**

Worcester County Central Landfill is subject to the testing, record keeping, and reporting requirements indicated below.

**Compliance Demonstration**

The Permittee shall retest the site-specific NMOC concentration every 5 years using the methods specified in 40 CFR §60.754(a)(3). **[Reference: COMAR 26.11.19.20D(6a)]** The Permittee shall submit to the Department a test protocol for review and approval at least 30 days prior to conducting the test. The Permittee shall submit test result to the Department within 45 days after completion of the test.

**PART 70 OPERATING PERMIT 24-047-0112  
WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
FACT SHEET**

The Permittee shall keep all the records required under this permit for at least five years and shall make such records available to the Department upon request. **[Reference: COMAR 26.11.03.06C]**

If the Permittee increases the maximum design capacity of the Worcester County Central Landfill after November 1, 1997, the Permittee shall amend and resubmit the design capacity report within 90 days of the issuance of an air quality Permit to Construct or a permit from the MDE Land Management Administration that authorizes the increase or any other change that increases the maximum design capacity of the landfill. **[Reference: COMAR 26.11.19.20D(2)]**

The Permittee shall estimate the annual NMOC emission rate calculated using the formula and procedures as described in 40 CFR §60.754(a). The Permittee shall prepare and submit an updated NMOC emission rate report by November 1 of each year. A less frequent emission rate report may be submitted upon approval by the Department in accordance with COMAR 26.11.19.20D(6). **[Reference: COMAR 26.11.19.20D(3)(a) & COMAR 26.11.19.20D(6)]**

The Permittee may, upon approval by the Department, submit a combined report to satisfy the NMOC reporting requirements and the annual Emissions Certification requirements. Such report shall be submitted by April 1 of each year for the previous calendar year. **[Reference: COMAR 26.11.19.20D(7)]**

**Emission Unit: EU-01      Table IV-1A**

**EU01** – MSW Landfill consists of nine (9) cells. Cell 1, Cell 2, Cell 3 and Cell 4 have been filled. Cell 5 is currently being filled. Landfill is provided with a gas collection and control system and gas is destroyed through burning at the enclosed flare station, now owned by the landfill and located within its premises. **[9-0024]**

**Applicable Standards and Limits**

**A. Standard for Air Emissions from Municipal Solid Waste Landfills**

**40 CFR 60, Subpart Cf**

**§60.31f Designated facilities.**

“(a) The designated facility to which these Emission Guidelines apply is each existing MSW landfill for which construction, reconstruction, or modification was commenced on or before July 17, 2014.

**PART 70 OPERATING PERMIT 24-047-0112  
WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
FACT SHEET**

**§60.32f Compliance times.**

Planning, awarding of contracts, installing, and starting up MSW landfill air emission collection and control equipment that is capable of meeting the Emission Guidelines under §60.33f must be completed within 30 months after the date an NMOC emission rate report shows NMOC emissions equal or exceed 34 megagrams per year (50 megagrams per year for the closed landfill subcategory); or within 30 months after the date of the most recent NMOC emission rate report that shows NMOC emissions equal or exceed 34 megagrams per year (50 megagrams per year for the closed landfill subcategory), if Tier 4 surface emissions monitoring shows a surface emission concentration of 500 parts per million methane or greater.

**§60.33f Emission Guidelines for municipal solid waste landfill emissions.**

Applicability

These emission guidelines apply to "each owner or operator of an MSW landfill having a design capacity greater than or equal to 2.5 million megagrams by mass and 2.5 million cubic meters by volume to collect and control MSW landfill emissions at each MSW landfill that meets the following conditions:

- (1) The landfill has accepted waste at any time since November 8, 1987, or has additional design capacity available for future waste deposition.
- (2) The landfill commenced construction, reconstruction, or modification on or before July 17, 2014.
- (3) The landfill has an NMOC emission rate greater than or equal to 34 megagrams per year or Tier 4 surface emissions monitoring shows a surface emission concentration of 500 parts per million methane or greater.
- (4) The landfill in the closed landfill subcategory and has an NMOC emission rate greater than or equal to 50 megagrams per year or Tier 4 surface emissions monitoring shows a surface emission concentration of 500 parts per million methane or greater." **[Reference: 40 CFR §60.33f(a)]**

Collection System

The Permittee must install "a gas collection and control system meeting the requirements in paragraphs (b)(1) through (3) and (c) of this section at each MSW landfill meeting the conditions in paragraph (a) of this section.

- (1) Collection system. Install and start up a collection and control system that captures the gas generated within the landfill within 30 months after:

**PART 70 OPERATING PERMIT 24-047-0112  
WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
FACT SHEET**

- (i) The first annual report in which the NMOC emission rate equals or exceeds 34 megagrams per year, unless Tier 2 or Tier 3 sampling demonstrates that the NMOC emission rate is less than 34 megagrams per year, as specified in §60.38f(d)(4); or
- (ii) The first annual NMOC emission rate report for a landfill in the closed landfill subcategory in which the NMOC emission rate equals or exceeds 50 megagrams per year, unless Tier 2 or Tier 3 sampling demonstrates that the NMOC emission rate is less than 50 megagrams per year, as specified in §60.38f(d)(4); or
- (iii) The most recent NMOC emission rate report in which the NMOC emission rate equals or exceeds 34 megagrams per year based on Tier 2, if the Tier 4 surface emissions monitoring shows a surface methane emission concentration of 500 parts per million methane or greater as specified in §60.38f(d)(4)(iii).

(2) Active. An active collection system must:

- (i) Be designed to 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 system equipment.
- (ii) 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 years or more if closed or at final grade.
- (iii) Collect gas at a sufficient extraction rate.
- (iv) Be designed to minimize off-site migration of subsurface gas.

(3) .....” **[Reference: 40 CFR §60.33f(b)]**

(c) Control system. The Permittee must “include provisions for the control of the gas collected from within the landfill through the use of control devices meeting the following requirements, except as provided in §60.24.

(1) A non-enclosed flare designed and operated in accordance with the parameters established in §60.18 except as noted in §60.37f(d); or

(2) A control system designed and operated to reduce NMOC by 98 weight percent; or when an enclosed combustion device is used for control, to either reduce NMOC by 98 weight percent or reduce the outlet NMOC concentration to less than 20 parts per million by volume, dry basis as hexane at 3 percent oxygen or less. The reduction efficiency or concentration in parts per million by volume must be established by an initial performance test to be completed no later than 180 days after the initial startup of the approved control system using the test methods specified in §60.35f(d). The performance test is not required for boilers and process heaters with design heat input capacities

**PART 70 OPERATING PERMIT 24-047-0112  
WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
FACT SHEET**

equal to or greater than 44 megawatts that burn landfill gas for compliance with this subpart.

- (i) If a boiler or process heater is used as the control device, the landfill gas stream must be introduced into the flame zone.
- (ii) The control device 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 §60.37f.
- (iii) For the closed landfill subcategory, the initial or most recent performance test conducted to comply with subpart WWW of this part; 40 CFR part 62, subpart GGG; or a state plan implementing subpart Cc of this part on or before July 17, 2014 is sufficient for compliance with this subpart.”  
**[Reference: 40 CFR §60.33f(c)]**

(3) The Permittee must “route the collected gas to 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. Venting of treated landfill gas to the ambient air is not allowed. If the treated landfill gas cannot be routed for subsequent sale or beneficial use, then the treated landfill gas must be controlled according to either paragraph (c)(1) or (2) of this section.” **[Reference: 40 CFR §60.33f(c)]**

(4) All emissions from any atmospheric vent from the gas treatment system are subject to the requirements of paragraph (b) or (c) of this section. For purposes of this subpart, atmospheric vents located on the condensate storage tank are not part of the treatment system and are exempt from the requirements of paragraph (b) or (c) of this section. **[Reference: 40 CFR §60.33f(c)]**

(d) Design capacity.

(1) ....

(2) When an increase in the maximum design capacity of a landfill with an initial design capacity less than 2.5 million megagrams or 2.5 million cubic meters results in a revised maximum design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters, the owner or operator must comply with paragraph (e) of this section. **[Reference: 40 CFR §60.33f(d)]**

(e) Emissions.

**PART 70 OPERATING PERMIT 24-047-0112  
WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
FACT SHEET**

A Permittee with an MSW landfill having a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters must "either install a collection and control system as provided in paragraphs (b) and (c) of this section or calculate an initial NMOC emission rate for the landfill using the procedures specified in §60.35f(a). The NMOC emission rate must be recalculated annually, except as provided in §60.38f(c)(3).

(1) If the calculated NMOC emission rate is less than 34 megagrams per year, the owner or operator must:

- (i) Submit an annual NMOC emission rate report according to §60.38f(c), except as provided in §60.38f(c)(3); and
- (ii) Recalculate the NMOC emission rate annually using the procedures specified in §60.35f(a) until such time as the calculated NMOC emission rate is equal to or greater than 34 megagrams per year, or the landfill is closed.

(A) If the calculated NMOC emission rate, upon initial calculation or annual recalculation required in paragraph (e)(1)(ii) of this section, is equal to or greater than 34 megagrams per year, the owner or operator must either: Comply with paragraphs (b) and (c) of this section; calculate NMOC emissions using the next higher tier in §60.35f; or conduct a surface emission monitoring demonstration using the procedures specified in §60.35f(a)(6).

(B) If the landfill is permanently closed, a closure report must be submitted to the Administrator as provided in §60.38f(f), except for exemption allowed under §60.31f(e)(4).

(C) For the closed landfill subcategory, if the most recently calculated NMOC emission rate is equal to or greater than 50 megagrams per year, the owner or operator must either: Submit a gas collection and control system design plan as specified in §60.38f(d), except for exemptions allowed under §60.31f(e)(3), and install a collection and control system as provided in paragraphs (b) and (c) of this section; calculate NMOC emissions using the next higher tier in §60.35f; or conduct a surface emission monitoring demonstration using the procedures specified in §60.35f(a)(6)." **[Reference: 40 CFR §60.33f(e)]**

(2) If the calculated NMOC emission rate is equal to or greater than 34 megagrams per year using Tier 1, 2, or 3 procedures, the owner or operator must either: submit a collection and control system design plan prepared by a professional engineer to the Administrator within 1 year as specified in §60.38f(d), except for exemptions allowed under §60.31f(e)(3); calculate NMOC emissions using a higher tier in §60.35f; or conduct a surface emission monitoring demonstration using the procedures specified in §60.35f(a)(6). **[Reference: 40 CFR §60.33f(e)]**

**PART 70 OPERATING PERMIT 24-047-0112  
WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
FACT SHEET**

Compliance Demonstration

The Permittee shall use the applicable testing methods and requirements listed in Section 1.2.A. The Permittee should follow the appropriate and applicable monitoring requirements listed in Section 1.3.A. As part of the record-keeping requirements, the Permittee shall follow the applicable recording requirements listed in Section 1.4.A. As part of the reporting requirements, the Permittee shall prepare and submit any of the applicable and appropriate reporting requirements listed Section 1.5.A.

**B. Operational Standards for Collection and Control Systems – [40 CFR §60.34f]**

The Permittee or operator “of an MSW landfill with a gas collection and control system used to comply with the provisions of §60.33f(b) and (c) must:

- (a) Operate the collection system such that gas is collected from each area, cell, or group of cells in the MSW landfill in which solid waste has been in place for:
  - (1) Five (5) years or more if active; or
  - (2) Two (2) years or more if closed or at final grade.
  
- (b) Operate the collection system with negative pressure at each wellhead except under the following conditions:
  - (1) A fire or increased well temperature. The owner or operator must record instances when positive pressure occurs in efforts to avoid a fire. These records must be submitted with the annual reports as provided in §60.38f(h)(1).
  - (2) Use of a geomembrane or synthetic cover. The owner or operator must develop acceptable pressure limits in the design plan.
  - (3) A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes must be approved by the Administrator as specified in §60.38f(d).
  
- (c) Operate each interior wellhead in the collection system with a landfill gas temperature less than 55 degrees Celsius (131 degrees Fahrenheit). The owner or operator may establish a higher operating temperature value at a particular well. A higher operating value demonstration must 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).

**PART 70 OPERATING PERMIT 24-047-0112  
WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
FACT SHEET**

- (d) Operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill. To determine if this level is exceeded, the owner or operator must conduct surface testing using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in §60.36(d). The owner or operator must conduct surface testing around the perimeter of the collection area and along a pattern that traverses the landfill at no more than 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 owner or operator may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan must be developed that includes a topographical 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.
- (e) Operate the system such that all collected gases are vented to a control system designed and operated in compliance with §60.33f(c). In the event the collection or control system is not operating, the gas mover system must be shut down and all 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.
- (f) Operate the control system at all times when the collected gas is routed to the system.
- (g) If monitoring demonstrates that the operational requirements in paragraph (b), (c), or (d) of this section are not met, corrective action must be taken as specified in §60.36f(a)(3) and (5) or (c). If corrective actions are taken as specified in §60.36f, the monitored exceedance is not a violation of the operational requirements in this section." **[Reference: 40 CFR §60.33f(e)]**

Compliance Demonstration

The Permittee shall use the specified testing methods in paragraphs (a) through (e) of §60.36f to determine compliance with §60.34f. **[Reference: 40 CFR §60.36f(a) thru (e)]** The Permittee should follow the appropriate monitoring requirements listed in §60.37, to demonstrate compliance with the standards in §60.36f. **[Reference: 40 CFR §60.37f(a) thru (h)]** As part of the record-keeping requirements, the Permittee shall follow the applicable recording requirements in

**PART 70 OPERATING PERMIT 24-047-0112  
WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
FACT SHEET**

§60.39f. Except as provided in §60.38f(d)(2), each owner or operator of an MSW landfill subject to the provisions of §60.33f(e) must keep for at least 5 years up-to-date, readily accessible, on-site records of the design capacity report that triggered §60.33f(e), 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. **[Reference: 40 CFR §60.39f(a) thru (j)]** As part of the reporting requirements, the Permittee shall prepare and submit any of the applicable and appropriate reporting requirements in §60.38(f). **[Reference: 40 CFR §60.38(f)(a) thru (l)]**

**C. Standards for Particulate Matter from Materials Handling and Construction.**

"A person may not cause or permit any material to be handled, transported, or stored, or a building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. These reasonable precautions shall include, but not be limited to, the following when appropriate as determined by the control officer: **(2)** Application of asphalt, oil, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which can create airborne dusts." **[Reference: COMAR 26.11.06.03D]**

**Compliance Demonstration**

The Permittee shall maintain and update the current plan that contains an explanation of reasonable precautions or best management practices (BMPs) that will be used to prevent particulate matter from becoming airborne. The Permittee shall perform a semi-annual inspection of the operation to verify that the reasonable precautions (BMPs) are being implemented. The Permittee shall keep results of the semi-annual inspections for a period of five (5) years and shall maintain the written reasonable precautions (BMPs) at the facility. **[Reference: COMAR 26.11.03.06C]**

---

**Emission Units: EU-01**

**EU01** – MSW Landfill consists of nine (9) cells. Cell 1, Cell 2, Cell 3 and Cell 4 have been filled. Cell 5 is currently being filled. Landfill is provided with a gas collection and control system and gas is destroyed through burning at the enclosed flare station, now owned by the landfill and located within its premises. **[9-0024]**

**PART 70 OPERATING PERMIT 24-047-0112  
WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
FACT SHEET**

**Applicable Standards/Limits**

Subpart AAAA – National Emission Standard for Hazardous Air Pollutants:  
Municipal Solid Waste Landfills.

**Applicability**

“You are subject to this subpart if you own or operate a MSW landfill that has accepted since November 8, 1987 or has additional capacity for waste disposition and meets any one of the three criteria in paragraphs (a)(1) through (3) of this section: (3) Your MSW landfill is an area source landfill that has a design capacity equal to or greater than 2.5 million megagrams (Mg) and 2.5 million cubic meters (m<sup>3</sup>) and has estimated uncontrolled emissions equal to or greater than 50 megagrams per year (Mg/yr) NMOC as calculated according to §60.754(a) of the MSW landfills new source performance standards in 40 CFR part 60, subpart WWW, the Federal plan, or an EPA approved and effective State or tribal plan that applies to your landfill.” **[Reference: 40.CFR §63.1935(a)(3)]**

“If your landfill is an existing affected source and is an area source meeting the criteria in §63.1935(a)(3), you must comply with the requirements in §§63.1955(b) and 63.1960 through 63.1980 by the date your landfill is required to install a collection and control system by 40 CFR 60.752(b)(2) of subpart WWW, the Federal plan, or EPA approved and effective State or tribal plan that applies to your landfill or by January 16, 2004, whichever occurs later.” **[Reference: 40.CFR §63.1945(f)]**

**Standards**

“If you are required by 40 CFR 60.752(b)(2) of subpart WWW, the Federal plan, or an EPA approved and effective State or tribal plan to install a collection and control system, you must comply with the requirements in §§63.1960 through 63.1985 and with the general provisions of this part specified in table 1 of this subpart.” **[Reference: 40.CFR §63.1955(b)]**

**General and Continuing Compliance Requirements**

“Compliance is determined in the same way it is determined for 40 CFR Part 60, subpart WWW, including performance testing, monitoring of the collection system, continuous parameter monitoring, and other credible evidence. In addition, continuous parameter monitoring data, collected under 40 CFR 60.756(b)(1), (c)(1), and (d) of subpart WWW, are used to demonstrate compliance with the operating conditions for control systems. If a deviation occurs, you have failed to meet the control device operating conditions described in this subpart and have deviated from the requirements of this subpart. Finally, you must develop and implement a written SSM plan according to the provisions in 40 CFR 63.6(e)(3). A copy of the SSM plan must be maintained on site.

**PART 70 OPERATING PERMIT 24-047-0112  
WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
FACT SHEET**

Failure to write, implement, or maintain a copy of the SSM plan is a deviation from the requirements of this subpart." **[Reference: 40.CFR §63.1960]**

Compliance Demonstration

"Keep records and reports as specified in 40 CFR Part 60, Subpart WWW, or in the Federal plan, EPA approved State plan or tribal plan that implements 40 CFR Part 60, Subpart Cc, whichever applies to your landfill, with one exception: You must submit the annual report described in 40 CFR 60.757(f) **every 6 months.**"

**[Reference: 40.CFR §63.1980(a)]**

"You must also keep records and reports as specified in the general provisions of 40 CFR Part 60 and this part as shown in Table 1 of this subpart. Applicable records in the general provisions include items such as SSM plans and the SSM plan reports." **[Reference: 40.CFR §63.1980(b)]**

---

Emission Unit: EU-02

Fugitive dusts from facility haul roads (both paved and unpaved). Most of the traffic along the haul roads is from the movement of refuse disposal trucks to the landfill's active face, and to the waste transfer facility.

Applicable Standards and Limits

**Control of Particulate Matter**

**COMAR 26.11.06.03D – Particulate Matter from Materials Handling and Construction.**

"A person may not cause or permit any material to be handled, transported, or stored, or a building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne."

Compliance Demonstration

The Permittee shall continue implementing the existing preventive maintenance plan that is used to prevent particulate matter from becoming airborne. The Permittee shall perform maintenance activities within the time frames established in the plan and shall maintain a log with records of the dates and description of the maintenance that was performed. The Permittee shall perform a semi-annual (every 6 months) inspection of the operation to verify that the reasonable precautions (BMPs) are being implemented.

The Permittee shall maintain a copy of the preventive maintenance plan and a record of the dates of and description of maintenance activity performed. The Permittee shall maintain records of the inspections conducted for a period of at

**PART 70 OPERATING PERMIT 24-047-0112  
WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
FACT SHEET**

least five years and make available to the Department upon request.  
[Reference: COMAR 26.11.03.06C]

---

**Emission Unit: EU-03**

One (1) 1,500-standard cubic feet per minute (scfm) enclosed flare. [MDE Reg. No. 9-0080]

**Applicable Standards and Limits**

**A. Control of Visible Emissions**

Control of Visible Emissions for grinding process

[COMAR 26.11.06.02C(2)] – Visible Emission Standards.

“In Areas I, II, V and VI, a person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is greater than 20 percent opacity.”

[COMAR 26.11.06.02A(2)] – Exception.

“The visible emissions standards in C of this regulation do not apply to emissions during start-up and process modification or adjustments, or occasional cleaning of control equipment, if: (a) The visible emissions are not greater than 40 percent opacity; and (b) The visible emissions do not occur for more than 6 consecutive minutes in any 60 minute period.”

**Compliance Demonstration**

The Permittee shall properly operate and maintain the flare in a manner to minimize visible emissions. The Permittee shall retain records of preventive maintenance on site for at least five years and make these records available to the Department upon request. [Reference: COMAR 26.11.03.06C] The Permittee shall report incidents of visible emissions in accordance with Permit Condition 4, Section III, Plant Wide Condition, “Report of Excess Emissions and Deviations.

**B. Control of Particulate Matter**

Particulate Matter from Confined Sources

[COMAR 26.11.06.03B(2)(a)] – “A person may not cause or permit to be discharged into the outdoor atmosphere from any other installation, particulate matter in excess of 0.03 gr/SCFD (68.7 mg/dscm).”

Particulate Matter from Materials Handling and Construction [COMAR 26.11.06.03D] – “A person may not cause or permit any material to be

**PART 70 OPERATING PERMIT 24-047-0112  
WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
FACT SHEET**

handled, transported, or stored, or a building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne.”

**Compliance Demonstration**

The Permittee shall properly operate and maintain engines in a manner to minimize visible emissions. **[Reference: COMAR 26.11.03.06C]** In addition, the Permittee “may not cause or permit to be discharged into the outdoor atmosphere from any other installation, particulate matter in excess of 0.03 gr/SCFD (68.7 mg/dscm).” **[COMAR 26.11.06.03B(2)(a)]** The Permittee “may not cause or permit any material to be handled, transported, or stored, or a building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne.” **[COMAR 26.11.06.03D]** The Permittee shall perform preventive maintenance once per month or as recommended by the equipment manufacturer on the flare. **[Reference: COMAR 26.11.03.06C]** The Permittee shall maintain a log of the maintenance performed on the flare and make the logs available to the Department upon request. **[Reference: COMAR 26.11.03.06C]**

**C. Operational Limit**

**Air Standards**

“A control system designed and operated to reduce NMOC by 98 weight-percent, or, when an enclosed combustion device is used for control, to either reduce NMOC by 98 weight percent or reduce the outlet NMOC concentration to less than 20 parts per million by volume, dry basis as hexane at 3 percent oxygen. The reduction efficiency or parts per million by volume shall be established by an initial performance test to be completed no later than 180 days after the initial startup of the approved control system using the test methods specified in §60.754(d).” **[Reference: 40 CFR §60.752(b)(2)(iii)B]**

“The control device shall be operated with the parameter ranges established during initial or most recent performance test. The operating parameters to be monitored as specified in 60.756.” **[Reference: 40 CFR §60.752(b)(2)(iii)B]**

**Compliance Demonstration**

The Permittee shall follow the testing procedures as stated in 40 CFR §60.754(d). As part of the monitoring requirement, the Permittee must comply with §60.752(b)(2)(iii) using an enclosed combustor shall calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment.” **[Reference: 40 CFR §60.756(b)]** As part of the Record keeping requirements,

**PART 70 OPERATING PERMIT 24-047-0112  
WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
FACT SHEET**

the Permittee "shall keep up-to-date, readily accessible records for the life of the control equipment of the data listed in paragraphs (b)(1) through (b)(4) of this section as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of 5 years. Records of the control device vendor specifications shall be maintained until removal." **[Reference: 40 CFR §60.758(b)]**

---

**Emission Unit: EU-04**

One (1) Morbark tub grinder, powered by a 540 bhp diesel engine (Caterpillar C-15). **[Reg. No. 9-0102]**

The engine serving the tub grinder fall under the definition of "nonroad" internal combustion engine. The U.S. EPA defined a "stationary" internal combustion engine, as an engine that does not meet the definition of a "nonroad" engine. Nonroad engines are not subject to federal NSPS requirements under 40 CFR 60, Subpart IIII or Subpart JJJJ or federal NESAHF requirements under 40 CFR 63, Subpart ZZZZ.

The U.S. EPA defines a "nonroad" internal combustion engine in 40 CFR §1068.30, as an internal combustion engine that meets any of the following criteria:

- (i) It is (or will be) used in or on a piece of equipment that is self-propelled or serves a dual purpose by both propelling itself and performing another function (such as garden tractors, off-highway mobile cranes and bulldozers).
- (ii) It is (or will be) used in or on a piece of equipment that is intended to be propelled while performing its function (such as lawnmowers and string trimmers).
- (iii) By itself or in or on a piece of equipment, it is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform.

**Applicable Standards and Limits**

**A. Control of Visible Emissions**

Control of Visible Emissions for grinding process  
**[COMAR 26.11.06.02C(2)] – Visible Emission Standards.**

**PART 70 OPERATING PERMIT 24-047-0112  
WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
FACT SHEET**

"In Areas I, II, V and VI, a person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is greater than 20 percent opacity."

**[COMAR 26.11.06.02A(2)] – Exception.**

"The visible emissions standards in C of this regulation do not apply to emissions during start-up and process modification or adjustments, or occasional cleaning of control equipment, if: (a) The visible emissions are not greater than 40 percent opacity; and (b) The visible emissions do not occur for more than 6 consecutive minutes in any 60 minute period."

Compliance Demonstration

The Permittee shall properly operate and maintain the tub grinder in a manner to minimize visible emissions. **[Reference: COMAR 26.11.06.02C(2)]** The Permittee shall report incidents of visible emissions in accordance with Permit Condition 4, Section III, Plant Wide Condition, "Report of Excess Emissions and Deviations.

**FOR ENGINE ONLY**

(3) Visible Emissions Limits for Stationary Internal Combustion Engine Powered Equipment

**[COMAR 26.11.09.05E] – Visible Emission Standards.**

"Emissions During Idle Mode. A person may not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity.

Emissions During Operating Mode. A person may not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity.

Exceptions.

(a) Section E(2) does not apply for a period of 2 consecutive minutes after a period of idling of 15 consecutive minutes for the purpose of clearing the exhaust system.

(b) Section E(2) does not apply to emissions resulting directly from cold engine start-up and warm-up for the following maximum periods:

- (i) Engines that are idled continuously when not in service: 30 minutes;
- (ii) All other engines: 15 minutes.

**PART 70 OPERATING PERMIT 24-047-0112  
WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
FACT SHEET**

- (c) Section E(2) and (3) does not apply while maintenance, repair, or testing is being performed by qualified mechanics.”

Compliance Demonstration

The Permittee shall properly operate and maintain the tub grinder in a manner to minimize visible emissions. [Reference: **COMAR 26.11.03.06C**] The Permittee shall properly operate and maintain engines in a manner to minimize visible emissions. [Reference: **COMAR 26.11.03.06C**]

**FOR ENGINE ONLY**

**B. Control of Sulfur Oxides Emissions**

[**COMAR 26.11.09.07A(1)**] – “A person may not burn, sell, or make available for sale any fuel with a sulfur content by weight in excess of or which otherwise exceeds the following limitations:

- (c) Distillate fuel oils, 0.3 percent;”

Compliance Demonstration

The Permittee shall obtain a certification form the fuel supplier indicating that the fuel oil complies with the limitation on sulfur content of the fuel oil. [Reference: **COMAR 26.11.03.06C**]. The Permittee shall retain annual fuel supplier certifications stating that the fuel oil is in compliance with this regulation must be maintained for at least five years. [Reference: **COMAR 26.11.09.07C**] The Permittee shall report annual fuel supplier certification to the Department upon request. [Reference: **COMAR 26.11.09.07C**]

**C. Operational Limit**

The engine powering the tub grinder shall operate no more than 1,000 hours for any 12-month rolling period.

Compliance Demonstration

As part of the monitoring requirements, the Permittee shall properly monitor the operating hours for each of the engines powering the tub grinder. The Permittee shall maintain for at least five (5) years, and shall make available to the Department upon request, records of the following information: (a) Operating hours for the engine that drives the tub grinder. (b) The Permittee shall report the amount of fuel oil combusted and engine operating hours as part of the annual emission certification. [Reference: **MDE PTC No. 047-0112-9-0102**] The Permittee shall report amount of fuel oil combusted and engine-operating hours as part of the annual emission certification. [Reference: **COMAR 26.11.06.03C**]

**PART 70 OPERATING PERMIT 24-047-0112  
WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
FACT SHEET**

**COMPLIANCE SCHEDULE**

The Worcester County Central Landfill is currently in compliance with all applicable air quality regulations.

**TITLE IV - ACID RAIN**

The Worcester County Central Landfill is not subject to any Acid Rain requirements.

**TITLE VI - OZONE DEPLETING SUBSTANCES**

The Worcester County Central Landfill shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F.

**SECTION 112 (r) - ACCIDENTAL RELEASE**

The Worcester County Central Landfill is not subject to the requirements under Section 112(r) - Accidental Release.

**PERMIT SHIELD**

The Worcester County Central Landfill did not request a permit shield for its facility operation.

**INSIGNIFICANT ACTIVITIES**

This section provides a list of insignificant emissions units that were reported in the Title V permit application. The applicable Clean Air Act requirements, if any, are listed below the insignificant activity.

- (1) No. 2 Stationary internal combustion engines with an output less than 500 brake horsepower (373 kilowatts) and which are not used to generate electricity for sale or for peak or load shaving;

The one (1) 6 Hp gasoline powered small portable emergency generator, and one (1) grinder-shredder powered by a 425 Hp

**PART 70 OPERATING PERMIT 24-047-0112  
WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
FACT SHEET**

diesel (Caterpillar, C-12) engine are subject to the following requirements:

The two (2) are subject to the following requirements:

- (A) COMAR 26.11.09.05E(2) – Emissions During Idle Mode. The Permittee may not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity.
- (B) COMAR 26.11.09.05E(3) – Emissions During Operating Mode. The Permittee may not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity.
- (C) Exceptions:
  - (i) COMAR 26.11.09.05E(2) does not apply for a period of 2 consecutive minutes after a period of idling of 15 consecutive minutes for the purpose of clearing the exhaust system.
  - (ii) COMAR 26.11.09.05E(2) does not apply to emissions resulting directly from cold engine start-up and warm-up for the following maximum periods:
    - (a) Engines that are idled continuously when not in service: 30 minutes
    - (b) all other engines: 15 minutes.
  - (iii) COMAR 26.11.09.05E(2) & (3) do not apply while maintenance, repair or testing is being performed by qualified mechanics.

- (2) No. 10 Fuel burning equipment using gaseous fuels or no. 1 or no. 2 fuel oil, and having a heat input less than 1,000,000 Btu (1.06 gigajoules) per hour;

The fuel burning units are subject to the following requirements:  
COMAR 26.11.09.05A(1) – Fuel Burning Equipment.  
“In Areas I, II, V and VI, a person may not cause or permit the discharge of emissions form any fuel burning equipment, other

**PART 70 OPERATING PERMIT 24-047-0112  
WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
FACT SHEET**

than water in an uncombined form, which is greater than 20 percent opacity.”

COMAR 26.11.09.05A(3) Exceptions: “Sections A(1) and (2) of this regulation do not apply to emissions during load changing, soot blowing, start-up, or adjustments or occasional cleaning of control equipment if: (a) The visible emissions are not greater than 40 percent opacity; and (b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty minute period.”

COMAR 26.11.09.07A(1) – Control of Sulfur Oxides from Fuel Burning Equipment.

“A person may not burn, sell, or make available for sale any fuel with a sulfur content by weight in excess of or which otherwise exceeds the following limitations: (c) Distillate fuel oils, 0.3 percent.”

- (3) Containers, reservoirs, or tanks used exclusively for:
- (a) No.   1   Storage of Numbers 1, 2, 4, 5, and 6 fuel oil and aviation jet engine fuel;
  - (b) No.   2   Storage of lubricating oils
- (4)   X   Space heaters utilizing direct heat transfer and used solely for comfort heat;

**PART 70 OPERATING PERMIT 24-047-0112  
WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
FACT SHEET**

**SECTION VI STATE-ONLY ENFORCEABLE CONDITIONS**

The Permittee is subject to the following State-only enforceable requirements:

1. Applicable Regulations:

- (A) COMAR 26.11.06.08 and 26.11.06.09, which generally prohibit the discharge of emissions beyond the property line in such a manner that a nuisance or air pollution is created.
- (B) COMAR 26.11.15.06, which prohibits the discharge of toxic air pollutants to the extent that such emissions will unreasonably endanger human health

2. Record Keeping and Reporting:

The Permittee shall submit to the Department, by April 1 of each year during the term of this permit, a written certification of the results of an analysis of emissions of toxic air pollutants from the Permittee's facility during the previous calendar year. The analysis shall include either:

- (a) a statement that previously submitted compliance demonstrations for emissions of toxic air pollutants remain valid; or
- (b) a revised compliance demonstration, developed in accordance with requirements included under COMAR 26.11.15 & 16, that accounts for changes in operations, analytical methods, emissions determinations, or other factors that have invalidated previous demonstrations.



Wes Moore  
Governor

*State of*



Serena McIlwain  
Secretary

*Maryland*

**DEPARTMENT OF THE ENVIRONMENT**

Air and Radiation Administration  
1800 Washington Boulevard, Suite 720  
Baltimore, MD 21230

Construction Permit

Part 70  
 Operating Permit

AUG 01 2023

PERMIT NO. 24-047-00112

DATE ISSUED \_\_\_\_\_

PERMIT FEE To be paid in accordance  
with COMAR 26.11.02.19B

EXPIRATION DATE September 30, 2027

**LEGAL OWNER & ADDRESS**

Worcester County DPW  
6113 Timmons Road  
Snow Hill, MD 21863  
Attn: Mr. Dallas Baker, Jr., P.E.  
Director of Public Works

**SITE**

Worcester County Central Landfill  
7091 Central Site Lane  
Newark, MD 21863  
Worcester County  
AI # 19217

**SOURCE DESCRIPTION**

Municipal Solid Waste Landfill.

This source is subject to the conditions described on the attached pages.

Program Manager

Director, Air and Radiation Administration

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

|                    |  |           |
|--------------------|--|-----------|
| <b>SECTION I</b>   | <b>SOURCE IDENTIFICATION .....</b>                         | <b>4</b>  |
| 1.                 | DESCRIPTION OF FACILITY.....                               | 4         |
| 2.                 | FACILITY INVENTORY LIST.....                               | 5         |
| <b>SECTION II</b>  | <b>GENERAL CONDITIONS .....</b>                            | <b>6</b>  |
| 1.                 | DEFINITIONS.....   | 6         |
| 2.                 | ACRONYMS.....  | 6         |
| 3.                 | EFFECTIVE DATE .....                                       | 7         |
| 4.                 | PERMIT EXPIRATION .....                                    | 7         |
| 5.                 | PERMIT RENEWAL .....                                       | 7         |
| 6.                 | CONFIDENTIAL INFORMATION .....                             | 8         |
| 7.                 | PERMIT ACTIONS .....                                       | 8         |
| 8.                 | PERMIT AVAILABILITY.....                                   | 9         |
| 9.                 | REOPENING THE PART 70 PERMIT FOR CAUSE BY THE EPA.....     | 9         |
| 10.                | TRANSFER OF PERMIT .....                                   | 9         |
| 11.                | REVISION OF PART 70 PERMITS – GENERAL CONDITIONS.....      | 9         |
| 12.                | SIGNIFICANT PART 70 OPERATING PERMIT MODIFICATIONS .....   | 10        |
| 13.                | MINOR PERMIT MODIFICATIONS .....                           | 11        |
| 14.                | ADMINISTRATIVE PART 70 OPERATING PERMIT AMENDMENTS .....   | 14        |
| 15.                | OFF-PERMIT CHANGES TO THIS SOURCE .....                    | 16        |
| 16.                | ON-PERMIT CHANGES TO SOURCES.....                          | 17        |
| 17.                | FEE PAYMENT .....  | 19        |
| 18.                | REQUIREMENTS FOR PERMITS-TO-CONSTRUCT AND APPROVALS.....   | 19        |
| 19.                | CONSOLIDATION OF PROCEDURES FOR PUBLIC PARTICIPATION ..... | 20        |
| 20.                | PROPERTY RIGHTS .....                                      | 21        |
| 21.                | SEVERABILITY .....   | 21        |
| 22.                | INSPECTION AND ENTRY .....                                 | 21        |
| 23.                | DUTY TO PROVIDE INFORMATION .....                          | 22        |
| 24.                | COMPLIANCE REQUIREMENTS .....                              | 22        |
| 25.                | CREDIBLE EVIDENCE .....                                    | 23        |
| 26.                | NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE .....        | 23        |
| 27.                | CIRCUMVENTION .....  | 23        |
| 28.                | PERMIT SHIELD.....   | 23        |
| 29.                | ALTERNATE OPERATING SCENARIOS.....                         | 24        |
| <b>SECTION III</b> | <b>PLANT WIDE CONDITIONS.....</b>                          | <b>25</b> |
| 1.                 | PARTICULATE MATTER FROM CONSTRUCTION AND DEMOLITION .....  | 25        |
| 2.                 | OPEN BURNING.....  | 25        |
| 3.                 | AIR POLLUTION EPISODE .....                                | 25        |
| 4.                 | REPORT OF EXCESS EMISSIONS AND DEVIATIONS.....             | 25        |
| 5.                 | ACCIDENTAL RELEASE PROVISIONS .....                        | 26        |
| 6.                 | GENERAL TESTING REQUIREMENTS .....                         | 27        |
| 7.                 | EMISSIONS TEST METHODS.....                                | 27        |
| 8.                 | EMISSIONS CERTIFICATION REPORT.....                        | 27        |
| 9.                 | COMPLIANCE CERTIFICATION REPORT .....                      | 29        |
| 10.                | CERTIFICATION BY RESPONSIBLE OFFICIAL.....                 | 29        |
| 11.                | SAMPLING AND EMISSIONS TESTING RECORD KEEPING.....         | 30        |

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

|                   |  |           |
|-------------------|--|-----------|
| 12.               | GENERAL RECORDKEEPING .....                    | 30        |
| 13.               | GENERAL CONFORMITY .....                       | 31        |
| 14.               | ASBESTOS PROVISIONS .....                      | 31        |
| 15.               | OZONE DEPLETING REGULATIONS .....              | 31        |
| 16.               | ACID RAIN PERMIT .....                         | 32        |
| <b>SECTION IV</b> | <b>PLANT SPECIFIC CONDITIONS .....</b>         | <b>33</b> |
| <b>SECTION V</b>  | <b>INSIGNIFICANT ACTIVITIES .....</b>          | <b>94</b> |
| <b>SECTION VI</b> | <b>STATE-ONLY ENFORCEABLE CONDITIONS .....</b> | <b>94</b> |

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**SECTION I SOURCE IDENTIFICATION**

**1. DESCRIPTION OF FACILITY**

The Worcester County Central Landfill Facility (WCCLF) is a municipal solid waste landfill serving the Worcester County, Maryland. The WCCLF is located at 7091 Central Site Lane, off Route 13 in Newark, Maryland and occupies a site of approximately 725 acres. The facility is operated by the Worcester County Department of Public Works. The SIC code for the landfill is 4953.

The design capacity of the CFL is 3.3 million megagrams (3.6 million tons) of MSW. Operation of the CLF began in 1990 with the MSW placement in the first of eight (8) planned cells having begun on March 27, 1990. Cell 1 was filled, and operation there ceased in October 1997. Placement of municipal waste in Cell 2 began October 1997 and ceased in October 2002. Placement of municipal waste in Cell 3 began immediately after operations at Cell 2 ceased in October 2002 and ceased in September 2007. Placement of municipal waste in Cell 4 has ceased and the cell is now filled. Cell 5 is currently being filled. The total accepted waste in place by December 31, 2021, was approximately 1,113,014 tons of MSW.

The WCCLF employs leachate recirculation as a means of leachate pretreatment and to accelerate waste stabilization. Leachate from the operating cell drains by gravity to sumps at each corner of the square cell, and then is automatically pumped from these collection sumps to a 500,000-gallon holding tank. Another 433,000 gallon holding tank is also present and connected if backup storage is needed. A 1,500 gallon tank on flatbed truck is used to draw leachate from this storage tank and to refill recharge wells in the active cell each day.

The facility also maintains a few emissions sources that are listed as insignificant activities due to the seasonal use nature and low emission levels. The facility maintains two (2) emergency generators (EGs): one (1) 6 Hp gasoline powered small portable emergency generator, and one (1) grinder-shredder powered by a 425 Hp diesel (Caterpillar, C-12) engine. The facility also maintains various space heaters for comfort heat, various containers for the storage of fuels and lubricating oils.

The USEPA recently published the "Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills," [40 CFR, Subpart Cf] finalized on August 29, 2016. The WCCLF is subject to the provisions because it is an existing MSW landfill for which construction, reconstruction, or modification was commenced on or before July 17, 2014. Furthermore, a new set of emission guidelines regulations for existing landfills has not been published by the State of Maryland, therefore making the new federal rule applicable.

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

The most recent Tier 2 testing in March 2017 resulted in a projected non-methane organic compounds (NMOC) generation rate of 22.26 Mg/yr NMOC for the year 2021. Furthermore, it is projected that the NMOC generation rates will remain below the 34 Mg/yr threshold. This projection was estimated using the Landfill gas emission model (LandGEM) and the site specific NMOC concentration (232.04 ppm), assuming 220,000 tons of waste for each year between 2017 to 2020. The results showed that the estimated NMOC generation rates are below the threshold that requires the installation of a collection system. However, the facility installed and maintains a gas collection and control system, in which NMOCs are destroyed through burning at the enclosed flare station, owned by the landfill and located within its premises.

A landfill is automatically subject to Part 70 operating permit requirements if it has a design capacity of at least 2.5 million megagrams (2.75 million tons), regardless of whether it is a major stationary source. WCCLF has a design capacity which is greater than the 2.75 million tons threshold, making it subject to the Title V permitting requirements. The refuse-in-place from waste accepted through December 31, 2021 was 1,113,014 tons.

The current Title V permit for WCCLF expired on September 30, 2021 and remains in effect. On November 30, 2020 the Department received a Part 70 renewal permit application for Worcester County Central Landfill. An administrative completeness review was conducted and the application was deemed to be complete. The completeness determination letter was sent on December 10, 2020 granting the facility an application shield.

**2. FACILITY INVENTORY LIST**

| <b>Emissions Unit Number</b> | <b>MDE Registration Number</b> | <b>Emissions Unit Name and Description</b>  | <b>Date of Registration</b> |
|------------------------------|--------------------------------|---|-----------------------------|
| EU01                         | 9-0024                         | MSW Landfill consisting of nine (9) cells. Cells 1 thru 4 have been filled. Cell 5 is currently being filled. | 1990                        |
| EU02                         | None                           | Fugitive dust from the facility's haul roads (both paved and unpaved)   | 1982                        |
| EU-03                        | 9-0080                         | One (1) 1,500-standard cubic feet per minute (scfm) enclosed flare with 98% destruction efficiency.           | 2008                        |
| EU-04                        | 9-0102                         | One (1) Morbark tub grinder powered by a 540 Hp diesel engine (Caterpillar C-15).                             | 2015                        |

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**SECTION II GENERAL CONDITIONS**

**1. DEFINITIONS**

**[COMAR 26.11.01.01] and [COMAR 26.11.02.01]**

The words or terms in this Part 70 permit shall have the meanings established under COMAR 26.11.01 and .02 unless otherwise stated in this permit.

**2. ACRONYMS**

|                 |  |
|-----------------|--|
| ARMA            | Air and Radiation Management Administration                                    |
| BACT            | Best Available Control Technology  |
| Btu             | British thermal unit   |
| CAA             | Clean Air Act  |
| CAM             | Compliance Assurance Monitoring  |
| CEM             | Continuous Emissions Monitor   |
| CFR             | Code of Federal Regulations  |
| CO              | Carbon Monoxide  |
| COMAR           | Code of Maryland Regulations   |
| EPA             | United States Environmental Protection Agency                                  |
| FR              | Federal Register   |
| gr              | grains   |
| HAP             | Hazardous Air Pollutant  |
| MACT            | Maximum Achievable Control Technology  |
| MDE             | Maryland Department of the Environment   |
| MVAC            | Motor Vehicle Air Conditioner  |
| NESHAPS         | National Emission Standards for Hazardous Air Pollutants                       |
| NO <sub>x</sub> | Nitrogen Oxides  |
| NSPS            | New Source Performance Standards   |
| NSR             | New Source Review  |
| OTR             | Ozone Transport Region   |
| PM              | Particulate Matter   |
| PM10            | Particulate Matter with Nominal Aerodynamic Diameter of 10 micrometers or less |
| ppm             | parts per million  |
| ppb             | parts per billion  |
| PSD             | Prevention of Significant Deterioration  |
| PTC             | Permit to construct  |
| PTO             | Permit to operate (State)  |
| SIC             | Standard Industrial Classification   |
| SO <sub>2</sub> | Sulfur Dioxide   |

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

|     |                            |
|-----|----------------------------|
| TAP | Toxic Air Pollutant        |
| tpy | tons per year              |
| VE  | Visible Emissions          |
| VOC | Volatile Organic Compounds |

**3. EFFECTIVE DATE**

The effective date of the conditions in this Part 70 permit is the date of permit issuance, unless otherwise stated in the permit.

**4. PERMIT EXPIRATION**

**[COMAR 26.11.03.13B(2)]**

Upon expiration of this permit, the terms of the permit will automatically continue to remain in effect until a new Part 70 permit is issued for this facility provided that the Permittee has submitted a timely and complete application and has paid applicable fees under COMAR 26.11.02.16.

Otherwise, upon expiration of this permit the right of the Permittee to operate this facility is terminated.

**5. PERMIT RENEWAL**

**[COMAR 26.11.03.02B(3)] and [COMAR 26.11.03.02E]**

The Permittee shall submit to the Department a completed application for renewal of this Part 70 permit at least 12 months before the expiration of the permit. Upon submitting a completed application, the Permittee may continue to operate this facility pending final action by the Department on the renewal.

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall submit such supplementary facts or corrected information no later than 10 days after becoming aware that this occurred. The Permittee shall also provide additional information as necessary to address any requirements that become applicable to the facility after the date a completed application was submitted, but prior to the release of a draft permit. This information shall be submitted to the Department no later than 20 days after a new requirement has been adopted.

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**6. CONFIDENTIAL INFORMATION**

**[COMAR 26.11.02.02G]**

In accordance with the provisions of the State Government Article, Sec. 10-611 et seq., Annotated Code of Maryland, all information submitted in an application shall be considered part of the public record and available for inspection and copying, unless the Permittee claims that the information is confidential when it is submitted to the Department. At the time of the request for inspection or copying, the Department will make a determination with regard to the confidentiality of the information. The Permittee, when requesting confidentiality, shall identify the information in a manner specified by the Department and, when requested by the Department, promptly provide specific reasons supporting the claim of confidentiality. Information submitted to the Department without a request that the information be deemed confidential may be made available to the public. Subject to approval of the Department, the Permittee may provide a summary of confidential information that is suitable for public review. The content of this Part 70 permit is not subject to confidential treatment.

**7. PERMIT ACTIONS**

**[COMAR 26.11.03.06E(3)] and [COMAR 26.11.03.20(A)]**

This Part 70 permit may be revoked or reopened and revised for cause. The filing of an application by the Permittee for a permit revision or renewal; or a notification of termination, planned changes or anticipated noncompliance by the facility, does not stay a term or condition of this permit.

The Department shall reopen and revise, or revoke the Permittee's Part 70 permit under the following circumstances:

- a. Additional requirements of the Clean Air Act become applicable to this facility and the remaining permit term is 3 years or more;
- b. The Department or the EPA determines that this Part 70 permit contains a material mistake, or is based on false or inaccurate information supplied by or on behalf of the Permittee;

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

- c. The Department or the EPA determines that this Part 70 permit must be revised or revoked to assure compliance with applicable requirements of the Clean Air Act; or
- d. Additional requirements become applicable to an affected source under the Federal Acid Rain Program.

**8. PERMIT AVAILABILITY**

**[COMAR 26.11.02.13G]**

The Permittee shall maintain this Part 70 permit in the vicinity of the facility for which it was issued, unless it is not practical to do so, and make this permit immediately available to officials of the Department upon request.

**9. REOPENING THE PART 70 PERMIT FOR CAUSE BY THE EPA**

**[COMAR 26.11.03.20B]**

The EPA may terminate, modify, or revoke and reissue a permit for cause as prescribed in 40 CFR §70.7(g)

**10. TRANSFER OF PERMIT**

**[COMAR 26.11.02.02E]**

The Permittee shall not transfer this Part 70 permit except as provided in COMAR 26.11.03.15.

**11. REVISION OF PART 70 PERMITS – GENERAL CONDITIONS**

**[COMAR 26.11.03.14] and [COMAR 26.11.03.06A(8)]**

- a. The Permittee shall submit an application to the Department to revise this Part 70 permit when required under COMAR 26.11.03.15 -.17.
- b. When applying for a revision to a Part 70 permit, the Permittee shall comply with the requirements of COMAR 26.11.03.02 and .03 except that the application for a revision need include only information listed that is related to the proposed change to the source and revision to

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

the permit. This information shall be sufficient to evaluate the proposed change and to determine whether it will comply with all applicable requirements of the Clean Air Act.

- c. The Permittee may not change any provision of a compliance plan or schedule in a Part 70 permit as an administrative permit amendment or as a minor permit modification unless the change has been approved by the Department in writing.
- d. A permit revision is not required for a change that is provided for in this permit relating to approved economic incentives, marketable permits, emissions trading, and other similar programs.

**12. SIGNIFICANT PART 70 OPERATING PERMIT MODIFICATIONS**

**[COMAR 26.11.03.17]**

The Permittee may apply to the Department to make a significant modification to its Part 70 Permit as provided in COMAR 26.11.03.17 and in accordance with the following conditions:

- a. A significant modification is a revision to the federally enforceable provisions in the permit that does not qualify as an administrative permit amendment under COMAR 26.11.03.15 or a minor permit modification as defined under COMAR 26.11.03.16.
- b. This permit does not preclude the Permittee from making changes, consistent with the provisions of COMAR 26.11.03, that would make the permit or particular terms and conditions of the permit irrelevant, such as by shutting down or reducing the level of operation of a source or of an emissions unit within the source. Air pollution control equipment shall not be shut down or its level of operation reduced if doing so would violate any term of this permit.
- c. Significant permit modifications are subject to all requirements of COMAR 26.11.03 as they apply to permit issuance and renewal, including the requirements for applications, public participation, and review by affected states and EPA, except:
  - (1) An application need include only information pertaining to the proposed change to the source and modification of this permit, including a description of the change and modification, and any

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

new applicable requirements of the Clean Air Act that will apply if the change occurs;

- (2) Public participation, and review by affected states and EPA, is limited to only the application and those federally enforceable terms and conditions of the Part 70 permit that are affected by the significant permit modification.
- d. As provided in COMAR 26.11.03.15B(5), an administrative permit amendment may be used to make a change that would otherwise require a significant permit modification if procedures for enhanced preconstruction review of the change are followed that satisfy the requirements of 40 CFR 70.7(d)(1)(v).
- e. Before making a change that qualifies as a significant permit modification, the Permittee shall obtain all permits-to-construct and approvals required by COMAR 26.11.02.
- f. The Permittee shall not make a significant permit modification that results in a violation of any applicable requirement of the Clean Air Act.
- g. The permit shield in COMAR 26.11.03.23 applies to a final significant permit modification that has been issued by the Department, to the extent applicable under COMAR 26.11.03.23.

**13. MINOR PERMIT MODIFICATIONS**

**[COMAR 26.11.03.16]**

The Permittee may apply to the Department to make a minor modification to the federally enforceable provisions of this Part 70 permit as provided in COMAR 26.11.03.16 and in accordance with the following conditions:

- a. A minor permit modification is a Part 70 permit revision that:
  - (1) Does not result in a violation of any applicable requirement of the Clean Air Act;
  - (2) Does not significantly revise existing federally enforceable monitoring, including test methods, reporting, record keeping, or compliance certification requirements except by:

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

- (a) Adding new requirements,
  - (b) Eliminating the requirements if they are rendered meaningless because the emissions to which the requirements apply will no longer occur, or
  - (c) Changing from one approved test method for a pollutant and source category to another;
- (3) Does not require or modify a:
- (a) Case-by-case determination of a federally enforceable emissions standard,
  - (b) Source specific determination for temporary sources of ambient impacts, or
  - (c) Visibility or increment analysis;
- (4) Does not seek to establish or modify a federally enforceable permit term or condition for which there is no corresponding underlying applicable requirement of the Clean Air Act, but that the Permittee has assumed to avoid an applicable requirement to which the source would otherwise be subject, including:
- (a) A federally enforceable emissions standard applied to the source pursuant to COMAR 26.11.02.03 to avoid classification as a Title I modification; and
  - (b) An alternative emissions standard applied to an emissions unit pursuant to regulations promulgated under Section 112(i)(5) of the Clean Air Act
- (5) Is not a Title I modification; and
- (6) Is not required under COMAR 26.11.03.17 to be processed as a significant modification to this Part 70 permit.
- b. Application for a Minor Permit Modification

The Permittee shall submit to the Department an application for a minor permit modification that satisfies the requirements of COMAR 26.11.03.03 which includes the following:

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

- (1) A description of the proposed change, the emissions resulting from the change, and any new applicable requirements that will apply if the change is made;
- (2) The proposed minor permit modification;
- (3) Certification by a responsible official, in accordance with COMAR 26.11.02.02F, that:
  - (a) The proposed change meets the criteria for a minor permit modification, and
  - (b) The Permittee has obtained or applied for all required permits-to-construct required by COMAR 26.11.03.16 with respect to the proposed change;
- (4) Completed forms for the Department to use to notify the EPA and affected states, as required by COMAR 26.11.03.07-.12.

**c. Permittee's Ability to Make Change**

- (1) For changes proposed as minor permit modifications to this permit that will require the applicant to obtain a permit to construct, the permit to construct must be issued prior to the new change.
- (2) During the period of time after the Permittee applies for a minor modification but before the Department acts in accordance with COMAR 26.11.03.16F(2):
  - (a) The Permittee shall comply with applicable requirements of the Clean Air Act related to the change and the permit terms and conditions described in the application for the minor modification.
  - (b) The Permittee is not required to comply with the terms and conditions in the permit it seeks to modify. If the Permittee fails to comply with the terms and conditions in the application during this time, the terms and conditions of both this permit and the application for modification may be enforced against it.

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

- d. The Permittee is subject to enforcement action if it is determined at any time that a change made under COMAR 26.11.03.16 is not within the scope of this regulation.
- e. Minor permit modification procedures may be used for Part 70 permit modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, but only to the extent that the minor permit modification procedures are explicitly provided for in regulations approved by the EPA as part of the Maryland SIP or in other applicable requirements of the Clean Air Act.

**14. ADMINISTRATIVE PART 70 OPERATING PERMIT AMENDMENTS**

**[COMAR 26.11.03.15]**

The Permittee may apply to the department to make an administrative permit amendment as provided in COMAR 26.11.03.15 and in accordance with the following conditions:

- a. An application for an administrative permit amendment shall:
  - (1) Be in writing;
  - (2) Include a statement certified by a responsible official that the proposed amendment meets the criteria in COMAR 26.11.03.15 for an administrative permit amendment, and
  - (3) Identify those provisions of this part 70 permit for which the amendment is requested, including the basis for the request.
- b. An administrative permit amendment:
  - (1) Is a correction of a typographical error;
  - (2) Identifies a change in the name, address, or phone number of a person identified in this permit, or a similar administrative change involving the Permittee or other matters which are not directly related to the control of air pollution;
  - (3) requires more frequent monitoring or reporting by the Permittee;

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

- (4) Allows for a change in ownership or operational control of a source for which the Department determines that no other revision to the permit is necessary and is documented as per COMAR 26.11.03.15B(4);
  - (5) Incorporates into this permit the requirements from preconstruction review permits or approvals issued by the Department in accordance with COMAR 26.11.03.15B(5), but only if it satisfies 40 CFR 70.7(d)(1)(v);
  - (6) Incorporates any other type of change, as approved by the EPA, which is similar to those in COMAR 26.11.03.15B(1)—(4);
  - (7) Notwithstanding COMAR 26.11.03.15B(1)—(6), all modifications to acid rain control provisions included in this Part 70 permit are governed by applicable requirements promulgated under Title IV of the Clean Air Act; or
  - (8) Incorporates any change to a term or condition specified as State-only enforceable, if the Permittee has obtained all necessary permits-to-construct and approvals that apply to the change.
- c. The Permittee may make the change addressed in the application for an administrative amendment upon receipt by the Department of the application, if all permits-to-construct or approvals otherwise required by COMAR 26.11.02 prior to making the change have first been obtained from the Department.
  - d. The permit shield in COMAR 26.11.03.23 applies to administrative permit amendments made under Section B(5) of COMAR 26.11.03.15 , but only after the Department takes final action to revise the permit.
  - e. The Permittee is subject to enforcement action if it is determined at any time that a change made under COMAR 26.11.03.15 is not within the scope of this regulation.

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**15. OFF-PERMIT CHANGES TO THIS SOURCE**

**[COMAR 26.11.03.19]**

The Permittee may make off-permit changes to this facility as provided in COMAR 26.11.03.19 and in accordance with the following conditions:

- a. The Permittee may make a change to this permitted facility that is not addressed or prohibited by the federally enforceable conditions of this Part 70 permit without obtaining a Part 70 permit revision if:
  - (1) The Permittee has obtained all permits and approvals required by COMAR 26.11.02 and .03;
  - (2) The change is not subject any requirements under Title IV of the Clean Air Act;
  - (3) The change is not a Title I modification; and
  - (4) The change does not violate an applicable requirement of the Clean Air Act or a federally enforceable term or condition of the permit.
- b. For a change that qualifies under COMAR 26.11.03.19, the Permittee shall provide contemporaneous written notice to the Department and the EPA, except for a change to an emissions unit or activity that is exempt from the Part 70 permit application, as provided in COMAR 26.11.03.04. This written notice shall describe the change, including the date it was made, any change in emissions, including the pollutants emitted, and any new applicable requirements of the Clean Air Act that apply as a result of the change.
- c. Upon satisfying the requirements of COMAR 26.11.03.19, the Permittee may make the proposed change.
- d. The Permittee shall keep a record describing:
  - (1) Changes made at the facility that result in emissions of a regulated air pollutant subject to an applicable requirement of the Clean Air Act, but not otherwise regulated under this permit; and
  - (2) The emissions resulting from those changes.

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

- e. Changes that qualify under COMAR 26.11.03.19 are not subject to the requirements for Part 70 revisions.
- f. The Permittee shall include each off-permit change under COMAR 26.11.03.19 in the application for renewal of the part 70 permit.
- g. The permit shield in COMAR 26.11.03.23 does not apply to off-permit changes made under COMAR 26.11.03.19.
- h. The Permittee is subject to enforcement action if it is determined that an off-permit change made under COMAR 26.11.03.19 is not within the scope of this regulation.

**16. ON-PERMIT CHANGES TO SOURCES**

**[COMAR 26.11.03.18]**

The Permittee may make on-permit changes that are allowed under Section 502(b)(10) of the Clean Air Act as provided in COMAR 26.11.03.18 and in accordance with the following conditions:

- a. The Permittee may make a change to this facility without obtaining a revision to this Part 70 permit if:
  - (1) The change is not a Title I modification;
  - (2) The change does not result in emissions in excess of those expressly allowed under the federally enforceable provisions of the Part 70 permit for the permitted facility or for an emissions unit within the facility, whether expressed as a rate of emissions or in terms of total emissions;
  - (3) The Permittee has obtained all permits and approvals required by COMAR 26.11.02 and .03;
  - (4) The change does not violate an applicable requirement of the Clean Air Act;
  - (5) The change does not violate a federally enforceable permit term or condition related to monitoring, including test methods, record keeping, reporting, or compliance certification requirements;

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

- (6) The change does not violate a federally enforceable permit term or condition limiting hours of operation, work practices, fuel usage, raw material usage, or production levels if the term or condition has been established to limit emissions allowable under this permit;
  - (7) If applicable, the change does not modify a federally enforceable provision of a compliance plan or schedule in this Part 70 permit unless the Department has approved the change in writing; and
  - (8) This permit does not expressly prohibit the change under COMAR 26.11.03.18.
- b. The Permittee shall notify the Department and the EPA in writing of a proposed on-permit change under COMAR 26.11.03.18 not later than 7 days before the change is made. The written information shall include the following information:
- (1) A description of the proposed change;
  - (2) The date on which the change is proposed to be made;
  - (3) Any change in emissions resulting from the change, including the pollutants emitted;
  - (4) Any new applicable requirement of the Clean Air Act; and
  - (5) Any permit term or condition that would no longer apply.
- c. The responsible official of this facility shall certify in accordance with COMAR 26.11.02.02F that the proposed change meets the criteria for the use of on-permit changes under COMAR 26.11.03.18.
- d. The Permittee shall attach a copy of each notice required by condition b. above to this Part 70 permit.
- e. On-permit changes that qualify under COMAR 26.11.03.18 are not subject to the requirements for part 70 permit revisions.
- f. Upon satisfying the requirements under COMAR 26.11.03.18, the Permittee may make the proposed change.

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

- g. The permit shield in COMAR 26.11.03.23 does not apply to on-permit changes under COMAR 26.11.03.18.
- h. The Permittee is subject to enforcement action if it is determined that an on-permit change made under COMAR 26.11.03.18 is not within the scope of the regulation or violates any requirement of the State air pollution control law.

**17. FEE PAYMENT**

**[COMAR 26.11.02.16A(2) & (5)(b)]**

- a. The fee for this Part 70 permit is as prescribed in Regulation.19 of COMAR 26.11.02.
- b. The fee is due on and shall be paid on or before each 12-month anniversary date of the permit.
- c. Failure to pay the annual permit fee constitutes cause for revocation of the permit by the Department.

**18. REQUIREMENTS FOR PERMITS-TO-CONSTRUCT AND APPROVALS**

**[COMAR 26.11.02.09.]**

The Permittee may not construct or modify or cause to be constructed or modified any of the following sources without first obtaining, and having in current effect, the specified permits-to-construct and approvals:

- a. New Source Review source, as defined in COMAR 26.11.01.01, approval required, except for generating stations constructed by electric companies;
- b. Prevention of Significant Deterioration source, as defined in COMAR 26.11.01.01, approval required, except for generating stations constructed by electric companies;
- c. New Source Performance Standard source, as defined in COMAR 26.11.01.01, permit to construct required, except for generating stations constructed by electric companies;

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

- d. National Emission Standards for Hazardous Air Pollutants source, as defined in COMAR 26.11.01.01, permit to construct required, except for generating stations constructed by electric companies;
- e. A stationary source of lead that discharges one ton per year or more of lead or lead compounds measured as elemental lead, permit to construct required, except for generating stations constructed by electric companies;
- f. All stationary sources of air pollution, including installations and air pollution control equipment, except as listed in COMAR 26.11.02.10, permit to construct required;
- g. In the event of a conflict between the applicability of (a.— e.) above and an exemption listed in COMAR 26.11.02.10, the provision that requires a permit applies.
- h. Approval of a PSD or NSR source by the Department does not relieve the Permittee obtaining an approval from also obtaining all permits-to-construct required b y (c.— g.) above.

**19. CONSOLIDATION OF PROCEDURES FOR PUBLIC PARTICIPATION**

**[COMAR 26.11.02.11C] and [COMAR 26.11.03.01K]**

The Permittee may request the Department to authorize special procedures for the Permittee to apply simultaneously, to the extent possible, for a permit to construct and a revision to this permit.

These procedures may provide for combined public notices, informational meetings, and public hearings for both permits but shall not adversely affect the rights of a person, including EPA and affected states, to obtain information about the application for a permit, to comment on an application, or to challenge a permit that is issued.

These procedures shall not alter any existing permit procedures or time frames.

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**20. PROPERTY RIGHTS**

**[COMAR 26.11.03.06E(4)]**

This Part 70 permit does not convey any property rights of any sort, or any exclusive privileges.

**21. SEVERABILITY**

**[COMAR 26.11.03.06A(5)]**

If any portion of this Part 70 permit is challenged, or any term or condition deemed unenforceable, the remainder of the requirements of the permit continues to be valid.

**22. INSPECTION AND ENTRY**

**[COMAR 26.11.03.06G(3)]**

The Permittee shall allow employees and authorized representatives of the Department, the EPA, and local environmental health agencies, upon presentation of credentials or other documents as may be required by law, to:

- a. Enter at a reasonable time without delay and without prior notification the Permittee's property where a Part 70 source is located, emissions-related activity is conducted, or records required by this permit are kept;
- b. Have access to and make copies of records required by the permit;
- c. Inspect all emissions units within the facility subject to the permit and all related monitoring systems, air pollution control equipment, and practices or operations regulated or required by the permit; and
- d. Sample or monitor any substances or parameters at or related to the emissions units at the facility for the purpose of determining compliance with the permit.

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**23. DUTY TO PROVIDE INFORMATION**

**[COMAR 26.11.03.06E(5)]**

The Permittee shall furnish to the Department, within a reasonable time specified by the Department, information requested in writing by the Department in order to determine whether the Permittee is in compliance with the federally enforceable conditions of this Part 70 permit, or whether cause exists for revising or revoking the permit. Upon request, the Permittee shall also furnish to the Department records required to be kept under the permit.

For information claimed by the Permittee to be confidential and therefore potentially not discloseable to the public, the Department may require the Permittee to provide a copy of the records directly to the EPA along with a claim of confidentiality.

The Permittee shall also furnish to the Department, within a reasonable time specified by the Department, information or records requested in writing by the Department in order to determine if the Permittee is in compliance with the State-only enforceable conditions of this permit.

**24. COMPLIANCE REQUIREMENTS**

**[COMAR 26.11.03.06E(1)] and [COMAR 26.11.03.06A(11)] and [COMAR 26.11.02.05]**

The Permittee shall comply with the conditions of this Part 70 permit. Noncompliance with the permit constitutes a violation of the Clean Air Act, and/or the Environment Article Title 2 of the Annotated Code of Maryland and may subject the Permittee to:

- a. Enforcement action,
- b. Permit revocation or revision,
- c. Denial of the renewal of a Part 70 permit, or
- d. Any combination of these actions.

The conditions in this Part 70 permit are enforceable by EPA and citizens under the Clean Air Act except for the State-only enforceable conditions.

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

Under Environment Article Section 2-609, Annotated Code of Maryland, the Department may seek immediate injunctive relief against a person who violates this permit in such a manner as to cause a threat to human health or the environment.

**25. CREDIBLE EVIDENCE**

Nothing in this permit shall be interpreted to preclude the use of credible evidence to demonstrate noncompliance with any term of this permit.

**26. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE**

**[COMAR 26.11.03.06E(2)]**

The need to halt or reduce activity in order to comply with the conditions of this permit may not be used as a defense in an enforcement action.

**27. CIRCUMVENTION**

**[COMAR 26.11.01.06]**

The Permittee may not install or use any article, machine, equipment or other contrivance, the use of which, without resulting in a reduction in the total weight of emissions, conceals or dilutes emissions which would otherwise constitute a violation of any applicable air pollution control regulation.

**28. PERMIT SHIELD**

**[COMAR 26.11.03.23]**

A permit shield as described in COMAR 26.11.03.23 shall apply only to terms and conditions in this Part 70 permit that have been specifically identified as covered by the permit shield. Neither this permit nor COMAR 26.11.03.23 alters the following:

- a. The emergency order provisions in Section 303 of the Clean Air Act, including the authority of EPA under that section;

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

- b. The liability of the Permittee for a violation of an applicable requirement of the Clean Air Act before or when this permit is issued or for a violation that continues after issuance;
- c. The requirements of the Acid Rain Program, consistent with Section 408(a) of the Clean Air Act;
- d. The ability of the Department or EPA to obtain information from a source pursuant to Maryland law and Section 114 of the Clean Air Act; or
- e. The authority of the Department to enforce an applicable requirement of the State air pollution control law that is not an applicable requirement of the Clean Air Act.

**29. ALTERNATE OPERATING SCENARIOS**

**[COMAR 26.11.03.06A(9)]**

For all alternate operating scenarios approved by the Department and contained within this permit, the Permittee, while changing from one approved scenario to another, shall contemporaneously record in a log maintained at the facility each scenario under which the emissions unit is operating and the date and time the scenario started and ended.

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**SECTION III PLANT WIDE CONDITIONS**

**1. PARTICULATE MATTER FROM CONSTRUCTION AND DEMOLITION**

**[COMAR 26.11.06.03D]**

The Permittee shall not cause or permit any building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne.

**2. OPEN BURNING**

**[COMAR 26.11.07]**

Except as provided in COMAR 26.11.07.04, the Permittee shall not cause or permit an open fire from June 1 through August 31 of any calendar year. Prior to any open burning, the Permittee shall request and receive approval from the Department.

**3. AIR POLLUTION EPISODE**

**[COMAR 26.11.05.04]**

When requested by the Department, the Permittee shall prepare in writing standby emissions reduction plans, consistent with good industrial practice and safe operating procedures, for reducing emissions creating air pollution during periods of Alert, Warning, and Emergency of an air pollution episode.

**4. REPORT OF EXCESS EMISSIONS AND DEVIATIONS**

**[COMAR 26.11.01.07] and [COMAR 26.11.03.06C(7)]**

The Permittee shall comply with the following conditions for occurrences of excess emissions and deviations from requirements of this permit, including those in Section VI – State-only Enforceable Conditions:

- a. Report any deviation from permit requirements that could endanger human health or the environment, by orally notifying the Department immediately upon discovery of the deviation;

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

- b. Promptly report all occurrences of excess emissions that are expected to last for one hour or longer by orally notifying the Department of the onset and termination of the occurrence;
- c. When requested by the Department the Permittee shall report all deviations from permit conditions, including those attributed to malfunctions as defined in COMAR 26.11.01.07A, within 5 days of the request by submitting a written description of the deviation to the Department. The written report shall include the cause, dates and times of the onset and termination of the deviation, and an account of all actions planned or taken to reduce, eliminate, and prevent recurrence of the deviation;
- d. The Permittee shall submit to the Department semi-annual monitoring reports that confirm that all required monitoring was performed, and that provide accounts of all deviations from permit requirements that occurred during the reporting periods. Reporting periods shall be January 1 through June 30 and July 1 through December 31, and reports shall be submitted within 30 days of the end of each reporting period. Each account of deviation shall include a description of the deviation, the dates and times of onset and termination, identification of the person who observed or discovered the deviation, causes and corrective actions taken, and actions taken to prevent recurrence. If no deviations from permit conditions occurred during a reporting period, the Permittee shall submit a written report that so states.
- e. When requested by the Department, the Permittee shall submit a written report to the Department within 10 days of receiving the request concerning an occurrence of excess emissions. The report shall contain the information required in COMAR 26.11.01.07D(2).

**5. ACCIDENTAL RELEASE PROVISIONS**

**[COMAR 26.11.03.03B(23)] and [40 CFR 68]**

Should the Permittee become subject to 40 CFR 68 during the term of this permit, the Permittee shall submit risk management plans by the date specified in 40 CFR 68.150 and shall certify compliance with the requirements of 40 CFR 68 as part of the annual compliance certification as required by 40 CFR 70.

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

The Permittee shall initiate a permit revision or reopening according to the procedures of 40 CFR 70.7 to incorporate appropriate permit conditions into the Permittee's Part 70 permit.

**6. GENERAL TESTING REQUIREMENTS**

**[COMAR 26.11.01.04]**

The Department may require the Permittee to conduct, or have conducted, testing to determine compliance with this Part 70 permit. The Department, at its option, may witness or conduct these tests. This testing shall be done at a reasonable time, and all information gathered during a testing operation shall be provided to the Department.

**7. EMISSIONS TEST METHODS**

**[COMAR 26.11.01.04]**

Compliance with the emissions standards and limitations in this Part 70 permit shall be determined by the test methods designated and described below or other test methods submitted to and approved by the Department.

Reference documents of the test methods approved by the Department include the following:

- a. 40 CFR 60, appendix A
- b. 40 CFR 51, appendix M
- c. The Department's Technical Memorandum 91-01 "Test Methods and Equipment Specifications for Stationary Sources", (January 1991), as amended through Supplement 3, (October 1, 1997)

**8. EMISSIONS CERTIFICATION REPORT**

**[COMAR 26.11.01.05-1] and [COMAR 26.11.02.19C] and  
[COMAR 26.11.02.19D]**

The Permittee shall certify actual annual emissions of regulated pollutants from the facility on a calendar year basis.

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

- a. The certification shall be on forms obtained from the Department and submitted to the Department not later than April 1 of the year following the year for which the certification is required;
- b. The individual making the certification shall certify that the information is accurate to the individual's best knowledge. The individual shall be:
  - (1) Familiar with each source for which the certifications forms are submitted, and
  - (2) Responsible for the accuracy of the emissions information;
- c. The Permittee shall maintain records necessary to support the emissions certification including the following information if applicable:
  - (1) The total amount of actual emissions of each regulated pollutant and the total of all regulated pollutants;
  - (2) An explanation of the methods used to quantify the emissions and the operating schedules and production data that were used to determine emissions, including significant assumptions made;
  - (3) Amounts, types and analyses of all fuels used;
  - (4) Emissions data from continuous emissions monitors that are required by this permit, including monitor calibration and malfunction information;
  - (5) Identification, description, and use records of all air pollution control equipment and compliance monitoring equipment including:
    - (a) Significant maintenance performed,
    - (b) Malfunctions and downtime, and
    - (c) Episodes of reduced efficiency of all equipment;
  - (6) Limitations on source operation or any work practice standards that significantly affect emissions; and
  - (7) Other relevant information as required by the Department.

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**9. COMPLIANCE CERTIFICATION REPORT**

**[COMAR 26.11.03.06G(6) and (7)]**

The Permittee shall submit to the Department and EPA Region III a report certifying compliance with each term of this Part 70 permit including each applicable standard, emissions limitation, and work practice for the previous calendar year by April 1 of each year.

- a. The compliance certification shall include:
  - (1) The identification of each term or condition of this permit which is the basis of the certification;
  - (2) The compliance status;
  - (3) Whether the compliance was continuous or intermittent;
  - (4) The methods used for determining the compliance status of each source, currently and over the reporting period; and
  - (5) Any other information required to be reported to the Department that is necessary to determine the compliance status of the Permittee with this permit.
- b. The Permittee shall submit the compliance certification reports to the Department and EPA simultaneously.

**10. CERTIFICATION BY RESPONSIBLE OFFICIAL**

**[COMAR 26.11.02.02F]**

All application forms, reports, and compliance certifications submitted pursuant to this permit shall be certified by a responsible official as to truth, accuracy, and completeness. The Permittee shall expeditiously notify the Department of an appointment of a new responsible official.

The certification shall be in the following form:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

**11. SAMPLING AND EMISSIONS TESTING RECORD KEEPING**

**[COMAR 26.11.03.06C(5)]**

The Permittee shall gather and retain the following information when sampling and testing for compliance demonstrations:

- a. The location as specified in this permit, and the date and time that samples and measurements are taken;
- b. All pertinent operating conditions existing at the time that samples and measurements are taken;
- c. The date that each analysis of a sample or emissions test is performed and the name of the person taking the sample or performing the emissions test;
- d. The identity of the Permittee, individual, or other entity that performed the analysis;
- e. The analytical techniques and methods used; and
- f. The results of each analysis.

**12. GENERAL RECORDKEEPING**

**[COMAR 26.11.03.06C(6)]**

The Permittee shall retain records of all monitoring data and information that support the compliance certification for a period of five (5) years from the date that the monitoring, sample measurement, application, report or emissions test was completed or submitted to the Department.

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

These records and support information shall include:

- a. All calibration and maintenance records;
- b. All original data collected from continuous monitoring instrumentation;
- c. Records which support the annual emissions certification; and
- d. Copies of all reports required by this permit.

**13. GENERAL CONFORMITY**

**[COMAR 26.11.26.09]**

The Permittee shall comply with the general conformity requirements of 40 CFR 93, Subpart B and COMAR 26.11.26.09.

**14. ASBESTOS PROVISIONS**

**[40 CFR 61, Subpart M]**

The Permittee shall comply with 40 CFR 61, Subpart M when conducting any renovation or demolition activities at the facility.

**15. OZONE DEPLETING REGULATIONS**

**[40 CFR 82, Subpart F]**

The Permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for MVACs in subpart B:

- a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the prohibitions and required practices pursuant to 40 CFR 82.154 and 82.156.
- b. Equipment used during the maintenance, service, repair or disposal of appliances shall comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

- c. Persons performing maintenance, service, repairs or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
- d. Persons performing maintenance, service, repairs or disposal of appliances shall certify with the Administrator pursuant to 40 CFR 82.162.
- e. Persons disposing of small appliances, MVACS, and MVAC-like appliances as defined in 40 CFR 82.152, shall comply with record keeping requirements pursuant to 40 CFR 82.166.
- f. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
- g. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

**16. ACID RAIN PERMIT**

Not applicable

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**SECTION IV PLANT SPECIFIC CONDITIONS**

This section provides tables that include the emissions standards, emissions limitations, and work practices applicable to each emissions unit located at this facility. The Permittee shall comply with all applicable emissions standards, emissions limitations and work practices included herein.

The tables also include testing, monitoring, record keeping and reporting requirements specific to each emissions unit. In addition to the requirements included here in **Section IV**, the Permittee is also subject to the general testing, monitoring, record keeping and reporting requirements included in **Section III – Plant Wide Conditions** of this permit.

Unless otherwise provided in the specific requirements for an emissions unit, the Permittee shall maintain at the facility for at least five (5) years, and shall make available to the Department upon request, all records that the Permittee is required under this section to establish. **[Authority: COMAR 26.11.03.06C(5)(g)]**

The WCCLF is currently subject to the following requirements:

| <b>Table IV – 1</b> |   |
|---------------------|---|
| <b>1.0</b>          | <b><u>Emissions Unit Number(s): EU01</u></b><br><br>EU01 - MSW Landfill consists of nine (9) cells. Cell 1, Cell 2, Cell 3 and Cell 4 have been filled. Cell 5 is currently being filled. Landfill is provided with a gas collection and control system and gas is destroyed through burning at the enclosed flare station, now owned by the landfill and located within its premises. <b>[9-0024]</b>  |
| <b>1.1</b>          | <b>Applicable Standards/Limits:</b><br><br>Central Landfill Facility is subject to the testing, record keeping, and reporting requirements indicated below.   |
| <b>1.2</b>          | <b>Testing Requirements:</b><br><br>The Permittee shall retest the site-specific NMOC concentration every 5 years using the methods specified in 40 CFR §60.754(a)(3). <b>[Reference: COMAR 26.11.19.20D(6a)]</b> The Permittee shall submit to the Department a test protocol for review and approval at least 30 days prior to conducting the test. The Permittee shall submit test result to the Department within 45 days after completion of the test. |

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

| <b>Table IV – 1</b> |  |
|---------------------|--|
| <b>1.3</b>          | <b>Monitoring Requirements:</b><br>See record keeping and reporting requirements.  |
| <b>1.4</b>          | <b>Record Keeping Requirements:</b><br><br>The Permittee shall keep all the records required under this permit for at least five years and shall make such records available to the Department upon request. <b>[Reference: COMAR 26.11.03.06C]</b>  |
| <b>1.5</b>          | <b>Reporting Requirements:</b><br><br>A. If the Permittee increases the maximum design capacity of the Central Landfill Facility after November 1, 1997, the Permittee shall amend and resubmit the design capacity report within 90 days of the issuance of an air quality Permit to Construct or a permit from the MDE Waste Management Administration that authorizes the increase or any other change that increases the maximum design capacity of the landfill. <b>[Reference: COMAR 26.11.19.20D(2)]</b><br><br>B. The Permittee shall estimate the annual NMOC emission rate calculated using the formula and procedures as described in 40 CFR §60.754(a). The Permittee shall prepare and submit an updated NMOC emission rate report by November 1 of each year. A less frequent emission rate report may be submitted upon approval by the Department in accordance with COMAR 26.11.19.20D(6). <b>[Reference: COMAR 26.11.19.20D(3)(a) &amp; COMAR 26.11.19.20D(6)]</b><br><br>C. The Permittee may, upon approval by the Department, submit a combined report to satisfy the NMOC reporting requirements and the annual Emissions Certification requirements. Such report shall be submitted by April 1 of each year for the previous calendar year. <b>[Reference: COMAR 26.11.19.20D(7)]</b> |

The WCCLF will be subject to the following requirements, if it's calculated NMOC emissions increase to 34 megagrams/yr or more:

| <b>Table IV – 1A</b> |  |
|----------------------|--|
| <b>1.0</b>           | <b><u>Emissions Unit Number(s): EU01</u></b><br><br>EU01 - MSW Landfill consists of nine (9) cells. Cell 1, Cell 2, Cell 3 and Cell 4 have been filled. Cell 5 is currently being filled. Landfill is provided with a gas collection and control system and gas is destroyed |

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

| <b>Table IV – 1A</b> |  |
|----------------------|--|
|                      | through burning at the enclosed flare station, now owned by the landfill and located within its premises. <b>[9-0024]</b>  |
| <b>1A.1</b>          | <p><b><u>Applicable Standards/Limits:</u></b></p> <p><b><u>A. Standard for Air Emissions from Municipal Solid Waste Landfills</u></b></p> <p><b><u>40 CFR 60, Subpart Cf</u></b><br/> <b><u>§60.31f Designated facilities.</u></b><br/> “(a) The designated facility to which these Emission Guidelines apply is each existing MSW landfill for which construction, reconstruction, or modification was commenced on or before July 17, 2014.</p> <p><b><u>§60.32f Compliance times.</u></b><br/> Planning, awarding of contracts, installing, and starting up MSW landfill air emission collection and control equipment that is capable of meeting the Emission Guidelines under §60.33f must be completed within 30 months after the date an NMOC emission rate report shows NMOC emissions equal or exceed 34 megagrams per year (50 megagrams per year for the closed landfill subcategory); or within 30 months after the date of the most recent NMOC emission rate report that shows NMOC emissions equal or exceed 34 megagrams per year (50 megagrams per year for the closed landfill subcategory), if Tier 4 surface emissions monitoring shows a surface emission concentration of 500 parts per million methane or greater.</p> <p><b><u>§60.33f Emission Guidelines for municipal solid waste landfill emissions.</u></b></p> <p><b><u>Applicability</u></b></p> <p>These emission guiles apply to “each owner or operator of an MSW landfill having a design capacity greater than or equal to 2.5 million megagrams by mass and 2.5 million cubic meters by volume to collect and control MSW landfill emissions at each MSW landfill that meets the following conditions:</p> <p>(1) The landfill has accepted waste at any time since November 8, 1987, or has additional design capacity available for future waste deposition.<br/> (2) The landfill commenced construction, reconstruction, or modification on or before July 17, 2014.<br/> (3) The landfill has an NMOC emission rate greater than or equal to</p> |

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

34 megagrams per year or Tier 4 surface emissions monitoring shows a surface emission concentration of 500 parts per million methane or greater.

(4) The landfill in the closed landfill subcategory and has an NMOC emission rate greater than or equal to 50 megagrams per year or Tier 4 surface emissions monitoring shows a surface emission concentration of 500 parts per million methane or greater.”

**[Reference: 40 CFR §60.33f(a)]**

Collection System

The Permittee must install “a gas collection and control system meeting the requirements in paragraphs (b)(1) through (3) and (c) of this section at each MSW landfill meeting the conditions in paragraph (a) of this section.

(1) Collection system. Install and start up a collection and control system that captures the gas generated within the landfill within 30 months after:

- (i) The first annual report in which the NMOC emission rate equals or exceeds 34 megagrams per year, unless Tier 2 or Tier 3 sampling demonstrates that the NMOC emission rate is less than 34 megagrams per year, as specified in §60.38f(d)(4); or
- (ii) The first annual NMOC emission rate report for a landfill in the closed landfill subcategory in which the NMOC emission rate equals or exceeds 50 megagrams per year, unless Tier 2 or Tier 3 sampling demonstrates that the NMOC emission rate is less than 50 megagrams per year, as specified in §60.38f(d)(4); or
- (iii) The most recent NMOC emission rate report in which the NMOC emission rate equals or exceeds 34 megagrams per year based on Tier 2, if the Tier 4 surface emissions monitoring shows a surface methane emission concentration of 500 parts per million methane or greater as specified in §60.38f(d)(4)(iii).

(2) Active. An active collection system must:

- (i) Be designed to 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 system equipment.
- (ii) 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 years or more if closed or at final grade.
- (iii) Collect gas at a sufficient extraction rate.

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

(iv) Be designed to minimize off-site migration of subsurface gas.

(3) .....” **[Reference: 40 CFR §60.33f(b)]**

(c) Control system. The Permittee must “include provisions for the control of the gas collected from within the landfill through the use of control devices meeting the following requirements, except as provided in §60.24.

(1) A non-enclosed flare designed and operated in accordance with the parameters established in §60.18 except as noted in §60.37f(d); or

(2) A control system designed and operated to reduce NMOC by 98 weight percent; or when an enclosed combustion device is used for control, to either reduce NMOC by 98 weight percent or reduce the outlet NMOC concentration to less than 20 parts per million by volume, dry basis as hexane at 3 percent oxygen or less. The reduction efficiency or concentration in parts per million by volume must be established by an initial performance test to be completed no later than 180 days after the initial startup of the approved control system using the test methods specified in §60.35f(d). The performance test is not required for boilers and process heaters with design heat input capacities equal to or greater than 44 megawatts that burn landfill gas for compliance with this subpart.

(i) If a boiler or process heater is used as the control device, the landfill gas stream must be introduced into the flame zone.

(ii) The control device 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 §60.37f.

(iii) For the closed landfill subcategory, the initial or most recent performance test conducted to comply with subpart WWW of this part; 40 CFR part 62, subpart GGG; or a state plan implementing subpart Cc of this part on or before July 17, 2014 is sufficient for compliance with this subpart.” **[Reference: 40 CFR §60.33f(c)]**

(3) The Permittee must “route the collected gas to 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. Venting of treated landfill gas to the ambient air is not allowed. If the treated landfill gas cannot be routed for subsequent sale or beneficial use, then the

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

treated landfill gas must be controlled according to either paragraph (c)(1) or (2) of this section." **[Reference: 40 CFR §60.33f(c)]**

(4) All emissions from any atmospheric vent from the gas treatment system are subject to the requirements of paragraph (b) or (c) of this section. For purposes of this subpart, atmospheric vents located on the condensate storage tank are not part of the treatment system and are exempt from the requirements of paragraph (b) or (c) of this section. **[Reference: 40 CFR §60.33f(c)]**

(d) Design capacity.

(1) ....

(2) When an increase in the maximum design capacity of a landfill with an initial design capacity less than 2.5 million megagrams or 2.5 million cubic meters results in a revised maximum design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters, the owner or operator must comply with paragraph (e) of this section. **[Reference: 40 CFR §60.33f(d)]**

(e) Emissions.

A Permittee with an MSW landfill having a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters must "either install a collection and control system as provided in paragraphs (b) and (c) of this section or calculate an initial NMOC emission rate for the landfill using the procedures specified in §60.35f(a). The NMOC emission rate must be recalculated annually, except as provided in §60.38f(c)(3).

(1) If the calculated NMOC emission rate is less than 34 megagrams per year, the owner or operator must:

- (i) Submit an annual NMOC emission rate report according to §60.38f(c), except as provided in §60.38f(c)(3); and
- (ii) Recalculate the NMOC emission rate annually using the procedures specified in §60.35f(a) until such time as the calculated NMOC emission rate is equal to or greater than 34 megagrams per year, or the landfill is closed.

(A) If the calculated NMOC emission rate, upon initial calculation or annual recalculation required in paragraph (e)(1)(ii) of this section, is equal to or greater than 34 megagrams per year, the owner or operator must either: Comply with paragraphs (b) and (c) of this

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

section; calculate NMOC emissions using the next higher tier in §60.35f; or conduct a surface emission monitoring demonstration using the procedures specified in §60.35f(a)(6).

(B) If the landfill is permanently closed, a closure report must be submitted to the Administrator as provided in §60.38f(f), except for exemption allowed under §60.31f(e)(4).

(C) For the closed landfill subcategory, if the most recently calculated NMOC emission rate is equal to or greater than 50 megagrams per year, the owner or operator must either: Submit a gas collection and control system design plan as specified in §60.38f(d), except for exemptions allowed under §60.31f(e)(3), and install a collection and control system as provided in paragraphs (b) and (c) of this section; calculate NMOC emissions using the next higher tier in §60.35f; or conduct a surface emission monitoring demonstration using the procedures specified in §60.35f(a)(6).” [Reference: 40 CFR §60.33f(e)]

(2) If the calculated NMOC emission rate is equal to or greater than 34 megagrams per year using Tier 1, 2, or 3 procedures, the owner or operator must either: submit a collection and control system design plan prepared by a professional engineer to the Administrator within 1 year as specified in §60.38f(d), except for exemptions allowed under §60.31f(e)(3); calculate NMOC emissions using a higher tier in §60.35f; or conduct a surface emission monitoring demonstration using the procedures specified in §60.35f(a)(6).  
**[Reference: 40 CFR §60.33f(e)]**

**B. Operational Standards for Collection and Control Systems – [40 CFR §60.34f]**

The Permittee or operator “of an MSW landfill with a gas collection and control system used to comply with the provisions of §60.33f(b) and (c) must:

(a) Operate the collection system such that gas is collected from each area, cell, or group of cells in the MSW landfill in which solid waste has been in place for:

- (1) Five (5) years or more if active; or
- (2) Two (2) years or more if closed or at final grade.

(b) Operate the collection system with negative pressure at each wellhead except under the following conditions:

- (1) A fire or increased well temperature. The owner or operator

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

|  |   |
|--|---|
|  | <p>must record instances when positive pressure occurs in efforts to avoid a fire. These records must be submitted with the annual reports as provided in §60.38f(h)(1).</p> <p>(2) Use of a geomembrane or synthetic cover. The owner or operator must develop acceptable pressure limits in the design plan.</p> <p>(3) A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes must be approved by the Administrator as specified in §60.38f(d).</p> <p>(c) Operate each interior wellhead in the collection system with a landfill gas temperature less than 55 degrees Celsius (131 degrees Fahrenheit). The owner or operator may establish a higher operating temperature value at a particular well. A higher operating value demonstration must 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).</p> <p>(d) Operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill. To determine if this level is exceeded, the owner or operator must conduct surface testing using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in §60.36(d). The owner or operator must conduct surface testing around the perimeter of the collection area and along a pattern that traverses the landfill at no more than 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 owner or operator may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan must be developed that includes a topographical 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.</p> |
|--|---|

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

- (e) Operate the system such that all collected gases are vented to a control system designed and operated in compliance with §60.33f(c). In the event the collection or control system is not operating, the gas mover system must be shut down and all 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.
- (f) Operate the control system at all times when the collected gas is routed to the system.
- (g) If monitoring demonstrates that the operational requirements in paragraph (b), (c), or (d) of this section are not met, corrective action must be taken as specified in §60.36f(a)(3) and (5) or (c). If corrective actions are taken as specified in §60.36f, the monitored exceedance is not a violation of the operational requirements in this section.” **[Reference: 40 CFR §60.33f(e)]**

**C. Particulate Matter from Materials Handling and Construction**

“A person may not cause or permit any material to be handled, transported, or stored, or a building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. These reasonable precautions shall include, but not be limited to, the following when appropriate as determined by the control officer: (2) Application of asphalt, oil, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which can create airborne dusts.” **[Reference: COMAR 26.11.06.03D]**

**1A.2 Testing Requirements:**

**A. Standards for Air Emissions from Municipal Solid Waste Landfills**

**§60.35f Test methods and procedures.**

The Permittee must use the “provisions in this section to calculate the landfill NMOC emission rate or to conduct a surface emission monitoring demonstration.

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

(a)(1) NMOC Emission Rate. The landfill owner or operator must calculate the NMOC emission rate using either Equation 1 provided in paragraph (a)(1)(i) of this section or Equation 2 provided in paragraph (a)(1)(ii) of this section. Both Equation 1 and Equation 2 may be used if the actual year-to-year solid waste acceptance rate is known, as specified in paragraph (a)(1)(i) of this section, for part of the life of the landfill and the actual year-to-year solid waste acceptance rate is unknown, as specified in paragraph (a)(1)(ii) of this section, for part of the life of the landfill. The values to be used in both Equation 1 and Equation 2 are 0.05 per year for k, 170 cubic meters per megagram for L<sub>o</sub>, and 4,000 parts per million by volume as hexane for the C<sub>NMOC</sub>. For landfills located in geographical areas with a 30-year annual average precipitation of less than 25 inches, as measured at the nearest representative official meteorologic site, the k value to be used is 0.02 per year.

(i)(A) Equation 1 must be used if the actual year-to-year solid waste acceptance rate is known.

$$M_{NMOC} = \sum_{ni} = 2kL_oM_i (e^{-kt_i}) (C_{NMOC}) (3.6 \times 10^{-9}) \quad (\text{Eq. 1})$$

Where:

M<sub>NMOC</sub> = Total NMOC emission rate from the landfill, megagrams per year.

k = Methane generation rate constant, year<sup>-1</sup>.

L<sub>o</sub> = Methane generation potential, cubic meters per megagram solid waste.

M<sup>i</sup> = Mass of solid waste in the i<sup>th</sup> section, megagrams.

t<sub>i</sub> = Age of the i<sup>th</sup> section, years.

C<sub>NMOC</sub> = Concentration of NMOC, parts per million by volume as hexane.

3.6 × 10<sup>-9</sup> = Conversion factor.

(B) The mass of nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value for M<sub>i</sub> if documentation of the nature and amount of such wastes is maintained.

(ii)(A) Equation 2 must be used if the actual year-to-year solid waste acceptance rate is unknown.

$$M_{NMOC} = 2 L_o R (e^{-k_c} - e^{-kt}) C_{NMOC} (3.6 \times 10^{-9}) \quad (\text{Eq. 2})$$

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

Where:

$M_{\text{NMOC}}$  = Mass emission rate of NMOC, megagrams per year.  
 $L_0$  = Methane generation potential, cubic meters per megagram solid waste.  
 $R$  = Average annual acceptance rate, megagrams per year.  
 $k$  = Methane generation rate constant, year<sup>-1</sup>.  
 $t$  = Age of landfill, years.  
 $C_{\text{NMOC}}$  = Concentration of NMOC, parts per million by volume as hexane.  
 $c$  = Time since closure, years; for active landfill  $c = 0$  and  $e^{-kc} = 1$ .  
 $3.6 \times 10^{-9}$  = Conversion factor.

- (B) The mass of nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value of  $R$ , if documentation of the nature and amount of such wastes is maintained.
- (2) Tier 1. The owner or operator must compare the calculated NMOC mass emission rate to the standard of 34 megagrams per year.
- (i) If the NMOC emission rate calculated in paragraph (a)(1) of this section is less than 34 megagrams per year, then the owner or operator must submit an NMOC emission rate report according to §60.38f(c) and must recalculate the NMOC mass emission rate annually as required under §60.33f(e).
- (ii) If the NMOC emission rate calculated in paragraph (a)(1) of this section is equal to or greater than 34 megagrams per year, then the landfill owner or operator must either:
- (A) Submit a gas collection and control system design plan within 1 year as specified in §60.38f(d) and install and operate a gas collection and control system within 30 months according to §60.33f(b) and (c);
  - (B) Determine a site-specific NMOC concentration and recalculate the NMOC emission rate using the Tier 2 procedures provided in paragraph (a)(3) of this section; or
  - (C) Determine a site-specific methane generation rate constant and recalculate the NMOC emission rate using the Tier 3 procedures provided in paragraph (a)(4) of this section.

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

- (3) Tier 2. The landfill owner or operator must determine the site-specific NMOC concentration using the following sampling procedure. The landfill owner or operator must install at least two sample probes per hectare, evenly distributed over the landfill surface that has retained waste for at least 2 years. If the landfill is larger than 25 hectares in area, only 50 samples are required. The probes should be evenly distributed across the sample area. The sample probes should be located to avoid known areas of nondegradable solid waste. The owner or operator must collect and analyze one sample of landfill gas from each probe to determine the NMOC concentration using Method 25 or 25C of appendix A of this part. Taking composite samples from different probes into a single cylinder is allowed; however, equal sample volumes must be taken from each probe. For each composite, the sampling rate, collection times, beginning and ending cylinder vacuums, or alternative volume measurements must be recorded to verify that composite volumes are equal. Composite sample volumes should not be less than one liter unless evidence can be provided to substantiate the accuracy of smaller volumes. Terminate compositing before the cylinder approaches ambient pressure where measurement accuracy diminishes. If more than the required number of samples is taken, all samples must be used in the analysis. The landfill owner or operator must divide the NMOC concentration from Method 25 or 25C by six to convert from  $C_{NMOC}$  as carbon to  $C_{NMOC}$  as hexane. If the landfill has an active or passive gas removal system in place, Method 25 or 25C samples may be collected from these systems instead of surface probes provided the removal system can be shown to provide sampling as representative as the two sampling probe per hectare requirement. For active collection systems, samples may be collected from the common header pipe. The sample location on the common header pipe must be before any gas moving, condensate removal, or treatment system equipment. For active collection systems, a minimum of three samples must be collected from the header pipe.
- (i) Within 60 days after the date of determining the NMOC concentration and corresponding NMOC emission rate, the owner or operator must submit the results according to §60.38f(j)(2).
- (ii) The landfill owner or operator must recalculate the NMOC mass emission rate using Equation 1 or Equation 2 provided in paragraph (a)(1)(i) or (ii) of this section using the average site-

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

specific NMOC concentration from the collected samples instead of the default value provided in paragraph (a)(1) of this section.

- (iii) If the resulting NMOC mass emission rate is less than 34 megagrams per year, then the owner or operator must submit a periodic estimate of NMOC emissions in an NMOC emission rate report according to §60.38f(c), and must recalculate the NMOC mass emission rate annually as required under §60.33f(e). The site-specific NMOC concentration must be retested every 5 years using the methods specified in this section.
- (iv) If the NMOC mass emission rate as calculated using the Tier 2 site-specific NMOC concentration is equal to or greater than 34 megagrams per year, the owner or operator must either:
  - (A) Submit a gas collection and control system design plan within 1 year as specified in §60.38f(d) and install and operate a gas collection and control system within 30 months according to §60.33f(b) and (c);
  - (B) Determine a site-specific methane generation rate constant and recalculate the NMOC emission rate using the site-specific methane generation rate using the Tier 3 procedures specified in paragraph (a)(4) of this section; or
  - (C) Conduct a surface emission monitoring demonstration using the Tier 4 procedures specified in paragraph (a)(6) of this section.
- (4) Tier 3. The site-specific methane generation rate constant must be determined using the procedures provided in Method 2E of appendix A of this part. The landfill owner or operator must estimate the NMOC mass emission rate using Equation 1 or Equation 2 in paragraph (a)(1)(i) or (ii) of this section and using a site-specific methane generation rate constant, and the site-specific NMOC concentration as determined in paragraph (a)(3) of this section instead of the default values provided in paragraph (a)(1) of this section. The landfill owner or operator must compare the resulting NMOC mass emission rate to the standard of 34 megagrams per year.
- (i) If the NMOC mass emission rate as calculated using the Tier 2 site-specific NMOC concentration and Tier 3 site-specific methane generation rate is equal to or greater than 34 megagrams per year, the owner or operator must either:
  - (A) Submit a gas collection and control system design plan within

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

- 1 year as specified in §60.38f(d) and install and operate a gas collection and control system within 30 months according to §60.33f(b) and (c); or
- (B) Conduct a surface emission monitoring demonstration using the Tier 4 procedures specified in paragraph (a)(6) of this section.
- (ii) If the NMOC mass emission rate is less than 34 megagrams per year, then the owner or operator must recalculate the NMOC mass emission rate annually using Equation 1 or Equation 2 in paragraph (a)(1) of this section and using the site-specific Tier 2 NMOC concentration and Tier 3 methane generation rate constant and submit a periodic NMOC emission rate report as provided in §60.38f(c). The calculation of the methane generation rate constant is performed only once, and the value obtained from this test must be used in all subsequent annual NMOC emission rate calculations.
- (5) Other methods. The owner or operator may use other methods to determine the NMOC concentration or a site-specific methane generation rate constant as an alternative to the methods required in paragraphs (a)(3) and (4) of this section if the method has been approved by the Administrator.
- (6) Tier 4. The landfill owner or operator must demonstrate that surface methane emissions are below 500 parts per million. Surface emission monitoring must be conducted on a quarterly basis using the following procedures. Tier 4 is allowed only if the landfill owner or operator can demonstrate that NMOC emissions are greater than or equal to 34 Mg/yr but less than 50 Mg/yr using Tier 1 or Tier 2. If both Tier 1 and Tier 2 indicate NMOC emissions are 50 Mg/yr or greater, then Tier 4 cannot be used. In addition, the landfill must meet the criteria in paragraph (a)(6)(viii) of this section.
- (i) The owner or operator must measure surface concentrations of methane along the entire perimeter of the landfill and along a pattern that traverses the landfill at no more than 30-meter intervals using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in §60.36f(d).
- (ii) The background concentration must be determined by moving

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

the probe inlet upwind and downwind at least 30 meters from the waste mass boundary of the landfill.

(iii) Surface emission monitoring must be performed in accordance with section 8.3.1 of Method 21 of appendix A of this part, except that the probe inlet must be placed no more than 5 centimeters above the landfill surface; the constant measurement of distance above the surface should be based on a mechanical device such as with a wheel on a pole.

(A) The owner or operator must use a wind barrier, similar to a funnel, when onsite average wind speed exceeds 4 miles per hour or 2 meters per second or gust exceeding 10 miles per hour. Average on-site wind speed must also be determined in an open area at 5-minute intervals using an on-site anemometer with a continuous recorder and data logger for the entire duration of the monitoring event. The wind barrier must surround the SEM monitor, and must be placed on the ground, to ensure wind turbulence is blocked. SEM cannot be conducted if average wind speed exceeds 25 miles per hour.

(B) Landfill surface areas where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover, and all cover penetrations must also be monitored using a device meeting the specifications provided in §60.36f(d).

(iv) Each owner or operator seeking to comply with the Tier 4 provisions in paragraph (a)(6) of this section must maintain records of surface emission monitoring as provided in §60.39f(g) and submit a Tier 4 surface emissions report as provided in §60.38f(d)(4)(iii).

(v) If there is any measured concentration of methane of 500 parts per million or greater from the surface of the landfill, the owner or operator must submit a gas collection and control system design plan within 1 year of the first measured concentration of methane of 500 parts per million or greater from the surface of the landfill according to §60.38f(d) and install and operate a gas collection and control system according to §60.33f(b) and (c) within 30 months of the most recent NMOC emission rate report in which the NMOC emission rate equals or exceeds 34 megagrams per year based on Tier 2.

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

(vi) If after four consecutive quarterly monitoring periods at a landfill, other than a closed landfill, there is no measured concentration of methane of 500 parts per million or greater from the surface of the landfill, the owner or operator must continue quarterly surface emission monitoring using the methods specified in this section.

(vii) If after four consecutive quarterly monitoring periods at a closed landfill there is no measured concentration of methane of 500 parts per million or greater from the surface of the landfill, the owner or operator must conduct annual surface emission monitoring using the methods specified in this section.

(viii) If a landfill has installed and operates a collection and control system that is not required by this subpart, then the collection and control system must meet the following criteria:

(A) The gas collection and control system must have operated for at least 6,570 out of 8,760 hours preceding the Tier 4 surface emissions monitoring demonstration.

(B) During the Tier 4 surface emissions monitoring demonstration, the gas collection and control system must operate as it normally would to collect and control as much landfill gas as possible.

(b) After the installation and startup of a collection and control system in compliance with this subpart, the owner or operator must calculate the NMOC emission rate for purposes of determining when the system can be capped, removed, or decommissioned as provided in §60.33f(f), using Equation 3:

$$M_{\text{NMOC}} = 1.89 \times 10^{-3} Q_{\text{LFG}} C_{\text{NMOC}} \quad (\text{Eq. 3})$$

Where:

$M_{\text{NMOC}}$  = Mass emission rate of NMOC, megagrams per year.

$Q_{\text{LFG}}$  = Flow rate of landfill gas, cubic meters per minute.

$C_{\text{NMOC}}$  = NMOC concentration, parts per million by volume as hexane.

(1) The flow rate of landfill gas,  $Q_{\text{LFG}}$ , must be determined by measuring the total landfill gas flow rate at the common header pipe that leads to the control system using a gas flow measuring device calibrated according to the provisions of section 10 of

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

Method 2E of appendix A of this part.

- (2) The average NMOC concentration,  $C_{NMOC}$ , must 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 of appendix A of this part. The sample location on the common header pipe must be before any condensate removal or other gas refining units. The landfill owner or operator must divide the NMOC concentration from Method 25 or Method 25C by six to convert from  $C_{NMOC}$  as carbon to  $C_{NMOC}$  as hexane.
- (3) The owner or operator may use another method to determine landfill gas flow rate and NMOC concentration if the method has been approved by the Administrator.
  - (i) Within 60 days after the date of calculating the NMOC emission rate for purposes of determining when the system can be capped or removed, the owner or operator must submit the results according to §60.38f(j)(2).
  - (ii) [Reserved]
- (c) When calculating emissions for Prevention of Significant Deterioration purposes, the owner or operator of each MSW landfill subject to the provisions of this subpart must estimate the NMOC emission rate for comparison to the Prevention of Significant Deterioration major source and significance levels in §51.166 or §52.21 of this chapter using Compilation of Air Pollutant Emission Factors, Volume I: Stationary Point and Area Sources (AP-42) or other approved measurement procedures.
- (d) For the performance test required in §60.33f(c)(1), the net heating value of the combusted landfill gas as determined in §60.18(f)(3) is calculated from the concentration of methane in the landfill gas as measured by Method 3C. A minimum of three 30-minute Method 3C samples are determined. The measurement of other organic components, hydrogen, and carbon monoxide is not applicable. Method 3C may be used to determine the landfill gas molecular weight for calculating the flare gas exit velocity under §60.18(f)(4).
- (1) Within 60 days after the date of completing each performance test (as defined in §60.8), the owner or operator must submit the

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

results of the performance tests required by paragraph (b) or (d) of this section, including any associated fuel analyses, according to §60.38f(j)(1).

(2) [Reserved]

(e) For the performance test required in §60.33f(c)(2), Method 25 or 25C (Method 25C may be used at the inlet only) of appendix A of this part must be used to determine compliance with the 98 weight-percent efficiency or the 20 parts per million by volume outlet NMOC concentration level, unless another method to demonstrate compliance has been approved by the Administrator as provided by §60.38f(d)(2). Method 3, 3A, or 3C must be used to determine oxygen for correcting the NMOC concentration as hexane to 3 percent. In cases where the outlet concentration is less than 50 ppm NMOC as carbon (8 ppm NMOC as hexane), Method 25A should be used in place of Method 25. Method 18 may be used in conjunction with Method 25A on a limited basis (compound specific, e.g., methane) or Method 3C may be used to determine methane. The methane as carbon should be subtracted from the Method 25A total hydrocarbon value as carbon to give NMOC concentration as carbon. The landfill owner or operator must divide the NMOC concentration as carbon by 6 to convert the  $C_{NMOC}$  as carbon to  $C_{NMOC}$  as hexane. Equation 4 must be used to calculate efficiency:

$$\text{Control Efficiency} = (\text{NMOC}_{\text{in}} - \text{NMOC}_{\text{out}}) / (\text{NMOC}_{\text{in}}) \quad (\text{Eq. 4})$$

Where:

$\text{NMOC}_{\text{in}}$  = Mass of NMOC entering control device.

$\text{NMOC}_{\text{out}}$  = Mass of NMOC exiting control device.

(1) Within 60 days after the date of completing each performance test (as defined in §60.8), the owner or operator must submit the results of the performance tests, including any associated fuel analyses, according to §60.38f(j)(1)."

(2) [Reserved]

**[Reference: 40 CFR §60.33f(e)]**

**B. Operational Standards for Collection and Control Systems**

The Permittee must follow the appropriate "compliance provisions in

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

this section.

(a) Except as provided in §60.38f(d)(2), the specified methods in paragraphs (a)(1) through (6) of this section must be used to determine whether the gas collection system is in compliance with §60.33f(b)(2).

(1) For the purposes of calculating the maximum expected gas generation flow rate from the landfill to determine compliance with §60.33f(b)(2)(i), either Equation 5 or Equation 6 in paragraph (a)(1)(i) or (ii) of this section must be used. The methane generation rate constant ( $k$ ) and methane generation potential ( $L_0$ ) kinetic factors should be those published in the most recent AP-42 or other site-specific values demonstrated to be appropriate and approved by the Administrator. If  $k$  has been determined as specified in §60.35f(a)(4), the value of  $k$  determined from the test must be used. A value of no more than 15 years must 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.

(i) For sites with unknown year-to-year solid waste acceptance rate:

$$Q_m = 2 L_0 R (e^{-kc} - e^{-kt}) \quad (\text{Eq. 5})$$

Where:

$Q_m$  = Maximum expected gas generation flow rate, cubic meters per year.

$L_0$  = Methane generation potential, cubic meters per megagram solid waste.

$R$  = Average annual acceptance rate, megagrams per year.

$k$  = Methane generation rate constant, year<sup>-1</sup>.

$t$  = Age of the landfill at equipment installation plus the time the owner or operator intends to use the gas mover equipment or active life of the landfill, whichever is less. If the equipment is installed after closure,  $t$  is the age of the landfill at installation, years.

$c$  = Time since closure, years (for an active landfill  $c = 0$  and  $e^{-kc} = 1$ ).

(ii) For sites with known year-to-year solid waste acceptance rate:

$$Q_M = \sum_{n_i} = 2 k L_0 M_i (e^{-kt_i}) \quad (\text{Eq. 6})$$

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

Where:

$Q_M$  = Maximum expected gas generation flow rate, cubic meters per year.

$k$  = Methane generation rate constant, year<sup>-1</sup>.

$L_0$  = Methane generation potential, cubic meters per megagram solid waste.

$M_i$  = Mass of solid waste in the  $i$ th section, megagrams.

$t_i$  = Age of the  $i$ th section, years.

- (iii) If a collection and control system has been installed, actual flow data may be used to project the maximum expected gas generation flow rate instead of, or in conjunction with, Equation 5 or Equation 6 in paragraph (a)(1)(i) or (ii) of this section. If the landfill is still accepting waste, the actual measured flow data will not equal the maximum expected gas generation rate, so calculations using Equation 5 or Equation 6 or other methods must be used to predict the maximum expected gas generation rate over the intended period of use of the gas control system equipment.
- (2) For the purposes of determining sufficient density of gas collectors for compliance with §60.33f(b)(2)(ii), the owner or operator must design a system of vertical wells, horizontal collectors, or other collection devices, satisfactory to the Administrator, capable of controlling and extracting gas from all portions of the landfill sufficient to meet all operational and performance standards.
- (3) For the purpose of demonstrating whether the gas collection system flow rate is sufficient to determine compliance with §60.33f(b)(2)(iii), the owner or operator must measure gauge pressure in the gas collection header applied to each individual well monthly. If a positive pressure exists, action must be initiated to correct the exceedance within 5 calendar days, except for the three conditions allowed under §60.34f(b). Any attempted corrective measure must not cause exceedances of other operational or performance standards.
- (i) If 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

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

cause analysis and correct the exceedance as soon as practicable, but not later than 60 days after positive pressure was first measured. The owner or operator must keep records according to §60.39f(e)(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 §60.38f(h)(7) as part of the next annual report. The owner or operator must keep records according to §60.39f(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 §60.38f(h)(7) and (k). The owner or operator must keep records according to §60.39f(e)(5).

(4) [Reserved]

(5) For the purpose of identifying whether excess air infiltration into the landfill is occurring, the owner or operator must monitor each well monthly for temperature as provided in §60.34f(c). If a well exceeds the operating parameter for temperature, action must be initiated to correct the exceedance within 5 calendar days. Any attempted corrective measure must 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

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

operator must keep records according to §60.39f(e)(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 measurement of landfill gas temperature greater than 55 degrees Celsius (131 degrees Fahrenheit). The owner or operator must submit the items listed in §60.38f(h)(7) as part of the next annual report. The owner or operator must keep records according to §60.39f(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 §60.38f(h)(7) and (k). The owner or operator must keep records according to §60.39f(e)(5).
- (6) An owner or operator seeking to demonstrate compliance with §60.33f(b)(2)(iv) through the use of a collection system not conforming to the specifications provided in §60.40f must provide information satisfactory to the Administrator as specified in §60.38f(d)(3) demonstrating that off-site migration is being controlled.
- (b) For purposes of compliance with §60.34f(a), each owner or operator of a controlled landfill must place each well or design component as specified in the approved design plan as provided in §60.38f(d). Each well must be installed no later than 60 days after the date on which the initial solid waste has been in place for a period of:
  - (1) Five (5) years or more if active; or
  - (2) Two (2) years or more if closed or at final grade.
- (c) The following procedures must be used for compliance with the surface methane operational standard as provided in §60.34f(d):
  - (1) After installation and startup of the gas collection system, the

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

owner or operator must monitor surface concentrations of methane along the entire perimeter of the collection area and along a pattern that traverses the landfill at no more than 30-meter intervals (or a site-specific established spacing) for each collection area on a quarterly basis using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in paragraph (d) of this section.

- (2) The background concentration must 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.
- (3) Surface emission monitoring must be performed in accordance with section 8.3.1 of Method 21 of appendix A of this part, except that the probe inlet must be placed within 5 to 10 centimeters of the ground. Monitoring must be performed during typical meteorological conditions.
- (4) Any reading of 500 parts per million or more above background at any location must be recorded as a monitored exceedance and the actions specified in paragraphs (c)(4)(i) through (v) of this section must be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of §60.34f(d).
  - (i) The location of each monitored exceedance must be marked and the location and concentration recorded. For location, you must determine the latitude and longitude coordinates using an instrument with an accuracy of at least 4 meters. The coordinates must be in decimal degrees with at least five decimal places.
  - (ii) Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each exceedance must be made and the location must 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 must be taken and the location must 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 (c)(4)(v) of this section must be

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

taken, and no further monitoring of that location is required until the action specified in paragraph (c)(4)(v) of this section has been taken.

- (iv) Any location that initially showed an exceedance but has a methane concentration less than 500 parts per million methane above background at the 10-day re-monitoring specified in paragraph (c)(4)(ii) or (iii) of this section must 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 (c)(4)(iii) or (v) of this section must 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 must 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.
- (5) The owner or operator must implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.
- (d) Each owner or operator seeking to comply with the provisions in paragraph (c) of this section or §60.35f(a)(6) must comply with the following instrumentation specifications and procedures for surface emission monitoring devices:
  - (1) The portable analyzer must meet the instrument specifications provided in section 6 of Method 21 of appendix A of this part, except that “methane” replaces all references to “VOC”.
  - (2) The calibration gas must be methane, diluted to a nominal concentration of 500 parts per million in air.
  - (3) To meet the performance evaluation requirements in section 8.1 of Method 21 of appendix A of this part, the instrument evaluation procedures of section 8.1 of Method 21 must be used.

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

(4) The calibration procedures provided in sections 8 and 10 of Method 21 of appendix A of this part must be followed immediately before commencing a surface monitoring survey.

(e) The provisions of this subpart apply at all times, including periods of startup, shutdown, or malfunction. During periods of startup, shutdown, and malfunction, you must comply with the work practice specified in §60.34f(e) in lieu of the compliance provisions in §60.36f.” **[Reference: 40 CFR §60.36f(a) thru (e)]**

**1A.3 Monitoring Requirements:**

**A. Standards for Air Emissions from Municipal Solid Waste Landfills**

See Monitoring Requirements in Section 1.3.B.

**B. Operational Standards for Collection and Control Systems**

**§60.37f Monitoring of operations.**

The Permittee must follow the appropriate “monitoring provisions in this section, except as provided in §60.38f(d)(2).

(a) Each owner or operator seeking to comply with §60.33f(b)(2) for an active gas collection system must install a sampling port and a thermometer, other temperature measuring device, or an access port for temperature measurements at each wellhead and:

(1) Measure the gauge pressure in the gas collection header on a monthly basis as provided in §60.36f(a)(3); and

(2) Monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis as follows:

(i) The nitrogen level must be determined using Method 3C, unless an alternative test method is established as allowed by §60.38f(d)(2).

(ii) Unless an alternative test method is established as allowed by §60.38f(d)(2), the oxygen level must be determined by an oxygen meter using Method 3A, 3C, or ASTM D6522-11 (incorporated by

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

reference, see §60.17). Determine the oxygen level 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; and
- (E) The allowable sample bias, zero drift, and calibration drift are  $\pm 10$  percent.

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

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

(3) Monitor temperature of the landfill gas on a monthly basis as provided in §60.36f(a)(5). The temperature measuring device must be calibrated annually using the procedure in this part 60, appendix A-1, Method 2, Section 10.3.

(b) Each owner or operator seeking to comply with §60.33f(c) using an enclosed combustor must calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment:

(1) A temperature monitoring device equipped with a continuous recorder and having a minimum accuracy of  $\pm 1$  percent of the temperature being measured expressed in degrees Celsius or  $\pm 0.5$  degrees Celsius, whichever is greater. A temperature monitoring device is not required for boilers or process heaters with design heat input capacity equal to or greater than 44 megawatts.

(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; and

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

- (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.
  
- (c) Each owner or operator seeking to comply with §60.33f(c) using a non-enclosed flare must install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment:
  - (1) A heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame.
  - (2) A device that records flow to the flare and bypass of the flare (if applicable). The owner or operator must:
    - (i) Install, calibrate, and maintain a gas flow rate measuring device that records the flow to the control device at least every 15 minutes; and
    - (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.
  
- (d) Each owner or operator seeking to demonstrate compliance with §60.33f(c) using a device other than a non-enclosed flare or an enclosed combustor or a treatment system must provide information satisfactory to the Administrator as provided in §60.38f(d)(2) describing the operation of the control device, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. The Administrator must review the information and either approve it, or request that additional information be submitted. The Administrator may specify additional appropriate monitoring procedures.
  
- (e) Each owner or operator seeking to install a collection system that

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

does not meet the specifications in §60.40f or seeking to monitor alternative parameters to those required by §§60.34f through 60.37f must provide information satisfactory to the Administrator as provided in §60.38f(d)(2) and (3) describing the design and operation of the collection system, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. The Administrator may specify additional appropriate monitoring procedures.

(f) Each owner or operator seeking to demonstrate compliance with the 500 parts per million surface methane operational standard in §60.34f(d) must monitor surface concentrations of methane according to the procedures provided in §60.36f(c) and the instrument specifications in §60.36f(d). Any closed landfill that has no monitored exceedances of the operational standard in three consecutive quarterly monitoring periods may skip to annual monitoring. Any methane reading of 500 parts per million or more above background detected during the annual monitoring returns the frequency for that landfill to quarterly monitoring.

(g) Each owner or operator seeking to demonstrate compliance with the control system requirements in §60.33f(c) using a landfill gas treatment system must maintain and operate all monitoring systems associated with the treatment system in accordance with the site-specific treatment system monitoring plan required in §60.39f(b)(5)(ii) and 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). The owner or operator must:

- (1) Install, calibrate, and maintain a gas flow rate measuring device that records the flow to the treatment system at least every 15 minutes; and
- (2) 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.

(h) The monitoring requirements of paragraphs (b), (c) (d) and (g) of this section apply at all times the affected source is operating, except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities. A monitoring system

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. You are required to complete monitoring system repairs in response to monitoring system malfunctions and to return the monitoring system to operation as expeditiously as practicable." [Reference: 40 CFR §60.37f(a) thru (h)]

- C. Particulate Matter from Materials Handling and Construction.**  
Permittee shall maintain and update the current plan that contains an explanation of reasonable precautions or best management practices (BMPs) that will be used to prevent particulate matter from becoming airborne. The Permittee shall perform a semi-annual inspection of the operation to verify that the reasonable precautions (BMPs) are being implemented. [Reference: COMAR 26.11.03.06C]

**1A.4 Record Keeping Requirements:**

**A. Standards for Air Emissions from Municipal Solid Waste Landfills**

See Record Keeping Requirements in Section 1.4.B.

**B. Operational Standards for Collection and Control Systems**

**§60.39f Recordkeeping guidelines.**

The Permittee must follow the appropriate "recordkeeping provisions in this section.

(a) Except as provided in §60.38f(d)(2), each owner or operator of an MSW landfill subject to the provisions of §60.33f(e) must keep for at least 5 years up-to-date, readily accessible, on-site records of the design capacity report that triggered §60.33f(e), 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) Except as provided in §60.38f(d)(2), each owner or operator of a controlled landfill must keep up-to-date, readily accessible records for the life of the control system equipment of the data listed in paragraphs (b)(1) through (5) of this section as measured during the

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

initial performance test or compliance determination. Records of subsequent tests or monitoring must be maintained for a minimum of 5 years. Records of the control device vendor specifications must be maintained until removal.

- (1) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with §60.33f(b):
  - (i) The maximum expected gas generation flow rate as calculated in §60.36f(a)(1). The owner or operator may use another method to determine the maximum gas generation flow rate, if the method has been approved by the Administrator.
  - (ii) The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in §60.40f(a)(1).
- (2) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with §60.33f(c) through use of an enclosed combustion device other than a boiler or process heater with a design heat input capacity equal to or greater than 44 megawatts:
  - (i) The average temperature measured at least every 15 minutes and averaged over the same time period of the performance test.
  - (ii) The percent reduction of NMOC determined as specified in §60.33f(c)(2) achieved by the control device.
- (3) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with §60.33f(c)(2)(i) through use of a boiler or process heater of any size: A description of the location at which the collected gas vent stream is introduced into the boiler or process heater over the same time period of the performance testing.
- (4) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with §60.33f(c)(1) through use of a non-enclosed flare, the flare type (i.e., steam-assisted, air-assisted, or non-assisted), all visible emission readings, heat content determination, flow rate or bypass flow rate measurements, and exit velocity determinations made during the performance test as specified in §60.18; and continuous records

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame or the flare flame is absent.

- (5) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with §60.33f(c)(3) through use of a landfill gas treatment system:
- (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) Identify who 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.
- (c) Except as provided in §60.38f(d)(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 §60.37f 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 §60.38f:

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

- (i) For enclosed combustors except for boilers and process heaters with design heat input capacity of 44 megawatts (150 million British thermal unit per hour) or greater, all 3-hour periods of operation during which the average temperature was more than 28 degrees Celsius (82 degrees Fahrenheit) below the average combustion temperature during the most recent performance test at which compliance with §60.33f(c) was determined.
- (ii) For boilers or process heaters, whenever there is a change in the location at which the vent stream is introduced into the flame zone as required under paragraph (b)(3) of this section.
- (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 §60.37f.
- (3) Each owner or operator subject to the provisions of this subpart who uses a boiler or process heater with a design heat input capacity of 44 megawatts or greater to comply with §60.33f(c) must keep an up-to-date, readily accessible record of all periods of operation of the boiler or process heater. (Examples of such records could include records of steam use, fuel use, or monitoring data collected pursuant to other state, local, tribal, or federal regulatory requirements.)
- (4) Each owner or operator seeking to comply with the provisions of this subpart by use of a non-enclosed flare must keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified under §60.37f(c), and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent.
- (5) Each owner or operator of a landfill seeking to comply with §60.33f(e) using an active collection system designed in accordance with §60.33f(b) must keep records of periods when the collection system or control device is not operating.
- (d) Except as provided in §60.38f(d)(2), each owner or operator subject to the provisions of this subpart must 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 on each collector that matches the labeling on the plot map.

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

- (1) Each owner or operator subject to the provisions of this subpart must keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors as specified under §60.36f(b).
  - (2) Each owner or operator subject to the provisions of this subpart must keep readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing or nondegradable waste excluded from collection as provided in §60.40f(a)(3)(i) as well as any nonproductive areas excluded from collection as provided in §60.40f(a)(3)(ii).
- (e) Except as provided in §60.38f(d)(2), each owner or operator subject to the provisions of this subpart must keep for at least 5 years up-to-date, readily accessible records of the following:
- (1) All collection and control system exceedances of the operational standards in §60.34f, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.
  - (2) Each owner or operator subject to the provisions of this subpart must also keep records of each wellhead temperature monitoring value of 55 degrees Celsius (131 degrees Fahrenheit) or above, each wellhead nitrogen level at or above 20 percent, and each wellhead oxygen level at or above 5 percent.
  - (3) For any root cause analysis for which corrective actions are required in §60.36f(a)(3) or (5), keep 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.
  - (4) For any root cause analysis for which corrective actions are required in §60.36f(a)(3)(ii) or (a)(5)(ii), keep 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.
  - (5) For any root cause analysis for which corrective actions are required in §60.36f(a)(3)(iii) or (a)(5)(iii), keep 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

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

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.

(f) Landfill owners or operators who convert design capacity from volume to mass or mass to volume to demonstrate that landfill design capacity is less than 2.5 million megagrams or 2.5 million cubic meters, as provided in the definition of "design capacity", must keep readily accessible, on-site records of the annual recalculation of site-specific density, design capacity, and the supporting documentation. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.

(g) Landfill owners or operators seeking to demonstrate that site-specific surface methane emissions are below 500 parts per million by conducting surface emission monitoring under the Tier 4 procedures specified in §60.35f(a)(6) must keep for at least 5 years up-to-date, readily accessible records of all surface emissions monitoring and information related to monitoring instrument calibrations conducted according to sections 8 and 10 of Method 21 of appendix A of this part, including all of the following items:

(1) Calibration records:

(i) Date of calibration and initials of operator performing the calibration.

(ii) Calibration gas cylinder identification, certification date, and certified concentration.

(iii) Instrument scale(s) used.

(iv) A description of any corrective action taken if the meter readout could not be adjusted to correspond to the calibration gas value.

(v) If an owner or operator makes their own calibration gas, a description of the procedure used.

(2) Digital photographs of the instrument setup. The photographs must be time and date-stamped and taken at the first sampling location prior to sampling and at the last sampling location after sampling at the end of each sampling day, for the duration of the

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

Tier 4 monitoring demonstration.

- (3) Timestamp of each surface scan reading:
  - (i) Timestamp should be detailed to the nearest second, based on when the sample collection begins.
  - (ii) A log for the length of time each sample was taken using a stopwatch (e.g., the time the probe was held over the area).
- (4) Location of each surface scan reading. The owner or operator must determine the coordinates using an instrument with an accuracy of at least 4 meters. Coordinates must be in decimal degrees with at least five decimal places.
- (5) Monitored methane concentration (parts per million) of each reading.
- (6) Background methane concentration (parts per million) after each instrument calibration test.
- (7) Adjusted methane concentration using most recent calibration (parts per million).
- (8) For readings taken at each surface penetration, the unique identification location label matching the label specified in paragraph (d) of this section.
- (9) Records of the operating hours of the gas collection system for each destruction device.
- (h) Except as provided in §60.38f(d)(2), each owner or operator subject to the provisions of this subpart must keep for at least 5 years up-to-date, readily accessible records of all collection and control system monitoring data for parameters measured in §60.37f(a)(1), (2), and (3).
  - (i) Any records required to be maintained by this subpart that are submitted electronically via the EPA's CDX may be maintained in electronic format.
  - (j) For each owner or operator reporting leachate or other liquids addition under §60.38f(l), keep records of any engineering

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

calculations or company records used to estimate the quantities of leachate or liquids added, the surface areas for which the leachate or liquids were applied, and the estimates of annual waste acceptance or total waste in place in the areas where leachate or liquids were applied.” **[Reference: 40 CFR §60.39f]**

**C. Particulate Matter from Materials Handling and Construction**

The Permittee shall keep results of the semi-annual inspections for a period of five (5) years and shall maintain the written reasonable precautions (BMPs) at the facility. **[Reference: COMAR 26.11.03.06C]**

**1A.5 Reporting Requirements:**

**A. Standards for Air Emissions from Municipal Solid Waste Landfills**

See Reporting Requirements in Section 1.5.B.

**B. Operational Standards for Collection and Control Systems**

**§60.38f Reporting guidelines.**

The Permittee must follow the “reporting provisions listed in this section, as applicable, except as provided under §§60.24 and 60.38f(d)(2).

(a) Design capacity report. For existing MSW landfills subject to this subpart, the initial design capacity report must be submitted no later than 90 days after the effective date of EPA approval of the state's plan under section 111(d) of the Clean Air Act. The initial design capacity report must contain the following information:

- (1) A map or plot of the landfill, providing the size and location of the landfill, and identifying all areas where solid waste may be landfilled according to the permit issued by the state, local, or tribal agency responsible for regulating the landfill.
- (2) The maximum design capacity of the landfill. Where the maximum design capacity is specified in the permit issued by the state, local, or tribal agency responsible for regulating the landfill, a copy of the permit specifying the maximum design capacity may

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

be submitted as part of the report. If the maximum design capacity of the landfill is not specified in the permit, the maximum design capacity must be calculated using good engineering practices. The calculations must be provided, along with the relevant parameters as part of the report. The landfill may calculate design capacity in either megagrams or cubic meters for comparison with the exemption values. If the owner or operator chooses to convert the design capacity from volume to mass or from mass to volume to demonstrate its design capacity is less than 2.5 million megagrams or 2.5 million cubic meters, the calculation must include a site-specific density, which must be recalculated annually. Any density conversions must be documented and submitted with the design capacity report. The state, local, or tribal agency or the Administrator may request other reasonable information as may be necessary to verify the maximum design capacity of the landfill.

(b) Amended design capacity report. An amended design capacity report must be submitted providing notification of an increase in the design capacity of the landfill, within 90 days of an increase in the maximum design capacity of the landfill to meet or exceed 2.5 million megagrams and 2.5 million cubic meters. This increase in design capacity may result from an increase in the permitted volume of the landfill or an increase in the density as documented in the annual recalculation required in §60.39f(f).

(c) NMOC emission rate report. For existing MSW landfills covered by this subpart with a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters, the NMOC emission rate report must be submitted following the procedure specified in paragraph (j)(2) of this section no later than 90 days after the effective date of EPA approval of the state's plan under section 111(d) of the Clean Air Act. The NMOC emission rate report must be submitted to the Administrator annually following the procedure specified in paragraph (j)(2) of this section, except as provided for in paragraph (c)(3) of this section. The Administrator may request such additional information as may be necessary to verify the reported NMOC emission rate.

- (1) The NMOC emission rate report must contain an annual or 5-year estimate of the NMOC emission rate calculated using the formula and procedures provided in §60.35f(a) or (b), as applicable.
- (2) The NMOC emission rate report must include all the data,

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

calculations, sample reports and measurements used to estimate the annual or 5-year emissions.

- (3) If the estimated NMOC emission rate as reported in the annual report to the Administrator is less than 34 megagrams per year in each of the next 5 consecutive years, the owner or operator may elect to submit, following the procedure specified in paragraph (j)(2) of this section, an estimate of the NMOC emission rate for the next 5-year period in lieu of the annual report. This estimate must include the current amount of solid waste-in-place and the estimated waste acceptance rate for each year of the 5 years for which an NMOC emission rate is estimated. All data and calculations upon which this estimate is based must be provided to the Administrator. This estimate must be revised at least once every 5 years. If the actual waste acceptance rate exceeds the estimated waste acceptance rate in any year reported in the 5-year estimate, a revised 5-year estimate must be submitted to the Administrator. The revised estimate must cover the 5-year period beginning with the year in which the actual waste acceptance rate exceeded the estimated waste acceptance rate.
  - (4) Each owner or operator subject to the requirements of this subpart is exempted from the requirements to submit an NMOC emission rate report, after installing a collection and control system that complies with §60.33f(b) and (c), during such time as the collection and control system is in operation and in compliance with §§60.34f and 60.36f.
- (d) Collection and control system design plan. The state plan must include a process for state review and approval of the site-specific design plan for each gas collection and control system. The collection and control system design plan must be prepared and approved by a professional engineer and must meet the following requirements:
- (1) The collection and control system as described in the design plan must meet the design requirements in §60.33f(b) and (c).
  - (2) The collection and control system design plan must include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping, or reporting provisions of §§60.34f through 60.39f proposed by the owner or operator.
  - (3) The collection and control system design plan must either conform to specifications for active collection systems in §60.40f or include a demonstration to the Administrator's satisfaction of

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

- the sufficiency of the alternative provisions to §60.40f.
- (4) Each owner or operator of an MSW landfill having a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters must submit a copy of the collection and control system design plan cover page that contains the engineer's seal to the Administrator within 1 year of the first NMOC emission rate report in which the NMOC emission rate equals or exceeds 34 megagrams per year, except as follows:
- (i) If the owner or operator elects to recalculate the NMOC emission rate after Tier 2 NMOC sampling and analysis as provided in §60.35f(a)(3) and the resulting rate is less than 34 megagrams per year, annual periodic reporting must be resumed, using the Tier 2 determined site-specific NMOC concentration, until the calculated NMOC emission rate is equal to or greater than 34 megagrams per year or the landfill is closed. The revised NMOC emission rate report, with the recalculated NMOC emission rate based on NMOC sampling and analysis, must be submitted, following the procedures in paragraph (j)(2) of this section, within 180 days of the first calculated exceedance of 34 megagrams per year.
  - (ii) If the owner or operator elects to recalculate the NMOC emission rate after determining a site-specific methane generation rate constant  $k$ , as provided in Tier 3 in §60.35f(a)(4), and the resulting NMOC emission rate is less than 34 megagrams per year, annual periodic reporting must be resumed. The resulting site-specific methane generation rate constant  $k$  must be used in the NMOC emission rate calculation until such time as the emissions rate calculation results in an exceedance. The revised NMOC emission rate report based on the provisions of §60.35f(a)(4) and the resulting site-specific methane generation rate constant  $k$  must be submitted, following the procedure specified in paragraph (j)(2) of this section, to the Administrator within 1 year of the first calculated NMOC emission rate equaling or exceeding 34 megagrams per year.
  - (iii) If the owner or operator elects to demonstrate that site-specific surface methane emissions are below 500 parts per million methane, based on the provisions of §60.35f(a)(6), then the owner or operator must submit annually a Tier 4 surface emissions report as specified in this paragraph (d)(4)(iii) following the procedure specified in paragraph (j)(2) of this section until a

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

surface emissions readings of 500 parts per million methane or greater is found. If the Tier 4 surface emissions report shows no surface emissions readings of 500 parts per million methane or greater for four consecutive quarters at a closed landfill, then the landfill owner or operator may reduce Tier 4 monitoring from a quarterly to an annual frequency. The Administrator may request such additional information as may be necessary to verify the reported instantaneous surface emission readings. The Tier 4 surface emissions report must clearly identify the location, date and time (to the nearest second), average wind speeds including wind gusts, and reading (in parts per million) of any value 500 parts per million methane or greater, other than non-repeatable, momentary readings. For location, you must determine the latitude and longitude coordinates using an instrument with an accuracy of at least 4 meters. The coordinates must be in decimal degrees with at least five decimal places. The Tier 4 surface emission report should also include the results of the most recent Tier 1 and Tier 2 results in order to verify that the landfill does not exceed 50 Mg/yr of NMOC.

- (A) The initial Tier 4 surface emissions report must be submitted annually, starting within 30 days of completing the fourth quarter of Tier 4 surface emissions monitoring that demonstrates that site-specific surface methane emissions are below 500 parts per million methane, and following the procedure specified in paragraph (j)(2) of this section.
- (B) The Tier 4 surface emissions rate report must be submitted within 1 year of the first measured surface exceedance of 500 parts per million methane, following the procedure specified in paragraph (j)(2) of this section.
- (iv) If the landfill is in the closed landfill subcategory, the owner or operator must submit a collection and control system design plan to the Administrator within 1 year of the first NMOC emission rate report in which the NMOC emission rate equals or exceeds 50 megagrams per year, except as follows:
  - (A) If the owner or operator elects to recalculate the NMOC emission rate after Tier 2 NMOC sampling and analysis as provided in §60.35f(a)(3) and the resulting rate is less than 50 megagrams per year, annual periodic reporting must be resumed, using the Tier 2 determined site-specific NMOC

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

concentration, until the calculated NMOC emission rate is equal to or greater than 50 megagrams per year or the landfill is closed. The revised NMOC emission rate report, with the recalculated NMOC emission rate based on NMOC sampling and analysis, must be submitted, following the procedure specified in paragraph (j)(2) of this section, within 180 days of the first calculated exceedance of 50 megagrams per year.

- (B) If the owner or operator elects to recalculate the NMOC emission rate after determining a site-specific methane generation rate constant  $k$ , as provided in Tier 3 in §60.35f(a)(4), and the resulting NMOC emission rate is less than 50 megagrams per year, annual periodic reporting must be resumed. The resulting site-specific methane generation rate constant  $k$  must be used in the NMOC emission rate calculation until such time as the emissions rate calculation results in an exceedance. The revised NMOC emission rate report based on the provisions of §60.35f(a)(4) and the resulting site-specific methane generation rate constant  $k$  must be submitted, following the procedure specified in paragraph (j)(2) of this section, to the Administrator within 1 year of the first calculated NMOC emission rate equaling or exceeding 50 megagrams per year.
- (C) The landfill owner or operator elects to demonstrate surface emissions are low, consistent with the provisions in paragraph (d)(4)(iii) of this section.
- (D) The landfill has already submitted a gas collection and control system design plan consistent with the provisions of subpart WWW of this part; 40 CFR part 62, subpart GGG; or a state plan implementing subpart Cc of this part.
- (5) The landfill owner or operator must notify the Administrator that the design plan is completed and submit a copy of the plan's signature page. The Administrator has 90 days to decide whether the design plan should be submitted for review. If the Administrator chooses to review the plan, the approval process continues as described in paragraph (c)(6) of this section. However, if the Administrator indicates that submission is not required or does not respond within 90 days, the landfill owner or operator can continue to implement the plan with the recognition that the owner or operator is proceeding at their own risk. In the

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

event that the design plan is required to be modified to obtain approval, the owner or operator must take any steps necessary to conform any prior actions to the approved design plan and any failure to do so could result in an enforcement action.

(6) Upon receipt of an initial or revised design plan, the Administrator must review the information submitted under paragraphs (d)(1) through (3) of this section 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. If the Administrator does not approve or disapprove the design plan, or does not request that additional information be submitted within 90 days of receipt, then the owner or operator may continue with implementation of the design plan, recognizing they would be proceeding at their own risk.

(7) If the owner or operator chooses to demonstrate compliance with the emission control requirements of this subpart using a treatment system as defined in this subpart, then the owner or operator must prepare a site-specific treatment system monitoring plan as specified in §60.39f(b)(5).

(e) Revised design plan. The owner or operator who has already been required to submit a design plan under paragraph (d) of this section, or under subpart WWW of this part; 40 CFR part 62, subpart GGG; or a state plan implementing subpart Cc of this part, must submit a revised design plan to the Administrator for approval as follows:

- (1) At least 90 days before expanding operations to an area not covered by the previously approved design plan.
- (2) Prior to installing or expanding the gas collection system in a way that is not consistent with the design plan that was submitted to the Administrator according to paragraph (d) of this section.

(f) *Closure report.* Each owner or operator of a controlled landfill must submit a closure report to the Administrator within 30 days of ceasing waste acceptance. The Administrator may request additional information as may be necessary to verify that permanent closure

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

has taken place in accordance with the requirements of 40 CFR 258.60. If a closure report has been submitted to the Administrator, no additional wastes may be placed into the landfill without filing a notification of modification as described under §60.7(a)(4).

(g) *Equipment removal report.* Each owner or operator of a controlled landfill must submit an equipment removal report to the Administrator 30 days prior to removal or cessation of operation of the control equipment.

(1) The equipment removal report must contain the following items:

- (i) A copy of the closure report submitted in accordance with paragraph (f) of this section; and
- (ii) A copy of the initial performance test report demonstrating that the 15-year minimum control period has expired, unless the report of the results 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 unit(s) tested, the pollutant(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 the EPA's CDX; and
- (iii) Dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 34 megagrams 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; or
- (iv) For the closed landfill subcategory, dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 50 megagrams or greater of NMOC per year, 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

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

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.

- (2) The Administrator may request such additional information as may be necessary to verify that all of the conditions for removal in §60.33f(f) have been met.

(h) *Annual report.* The owner or operator of a landfill seeking to comply with §60.33f(e)(2) using an active collection system designed in accordance with §60.33f(b) must submit to the Administrator, following the procedures specified in paragraph (j)(2) of this section, an annual report of the recorded information in paragraphs (h)(1) through (7) of this section. The initial annual report must be submitted within 180 days of installation and startup of the collection and control system. The initial annual report must include the initial performance test report required under §60.8, as applicable, unless the report of the results of the performance test has been submitted to the EPA via the EPA's CDX. In the initial annual report, the process unit(s) tested, the pollutant(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 the EPA's CDX. The initial performance test report must be submitted, following the procedure specified in paragraph (j)(1) of this section, no later than the date that the initial annual report is submitted. For enclosed combustion devices and flares, reportable exceedances are defined under §60.39f(c)(1).

- (1) Value and length of time for exceedance of applicable parameters monitored under §60.37f(a)(1), (b), (c), (d), and (g).
- (2) Description and duration of all periods when the gas stream was diverted from the control device or treatment system through a bypass line or the indication of bypass flow as specified under §60.37f.
- (3) Description and duration of all periods when the control device or treatment system was not operating and length of time the control device or treatment system was not operating.
- (4) All periods when the collection system was not operating.
- (5) The location of each exceedance of the 500 parts per million methane concentration as provided in §60.34f(d) and the concentration recorded at each location for which an exceedance was recorded in the previous month. For location, you must

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

- determine the latitude and longitude coordinates using an instrument with an accuracy of at least 4 meters. The coordinates must be in decimal degrees with at least five decimal places.
- (6) The date of installation and the location of each well or collection system expansion added pursuant to §60.36f(a)(3), (a)(5), (b), and (c)(4).
- (7) For any corrective action analysis for which corrective actions are required in §60.36f(a)(3) or (5) and that take more than 60 days to correct the exceedance, 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 reading, and, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates.
- (i) *Initial performance test report.* Each owner or operator seeking to comply with §60.33f(c) must include the following information with the initial performance test report required under §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.
- (j) *Electronic reporting.* The owner or operator must submit reports electronically according to paragraphs (j)(1) and (2) of this section.

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

- (1) Within 60 days after the date of completing each performance test (as defined in §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](https://www3.epa.gov/ttn/chief/ert/ert_info.html)) at the time of the test, you must submit the results of the 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 (j)(1)(i).
  - (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 §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

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

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. 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.

(k) *Corrective action and the corresponding timeline.* The owner or operator must submit according to paragraphs (k)(1) and (2) of this section.

(1) For corrective action that is required according to §60.36f(a)(3)(iii) or (a)(5)(iii) and is expected to take longer than 120 days after the initial exceedance to complete, you must submit the root cause analysis, corrective action analysis, and corresponding implementation timeline to the Administrator as soon as practicable but no later than 75 days after the first measurement of positive pressure or temperature monitoring value of 55 degrees Celsius (131 degrees Fahrenheit) or above. The Administrator must approve the plan for corrective action and the corresponding timeline.

(2) For corrective action that is required according to §60.36f(a)(3)(iii) or (a)(5)(iii) and is not completed within 60 days after the initial exceedance, you must submit a notification to the Administrator as soon as practicable but no later than 75 days after the first measurement of positive pressure or temperature exceedance.

(l) *Liquids addition.* The owner or operator of an affected landfill with a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters that has employed leachate recirculation or added liquids based on a Research, Development, and Demonstration permit (issued through Resource Conservation and Recovery Act, subtitle D, part 258) within the last 10 years must submit to the Administrator, annually, following the procedure specified in paragraph (j)(2) of this section, the following information:

(1) Volume of leachate recirculated (gallons per year) and the reported basis of those estimates (records or engineering estimates).

(2) Total volume of all other liquids added (gallons per year) and the

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

reported basis of those estimates (records or engineering estimates).

- (3) Surface area (acres) over which the leachate is recirculated (or otherwise applied).
  - (4) Surface area (acres) over which any other liquids are applied.
  - (5) The total waste disposed (megagrams) in the areas with recirculated leachate and/or added liquids based on on-site records to the extent data are available, or engineering estimates and the reported basis of those estimates.
  - (6) The annual waste acceptance rates (megagrams per year) in the areas with recirculated leachate and/or added liquids, based on on-site records to the extent data are available, or engineering estimates.
  - (7) The initial report must contain items in paragraph (l)(1) through (6) of this section per year for the most recent 365 days as well as for each of the previous 10 years, to the extent historical data are available in on-site records, and the report must be submitted no later than:
    - (i) September 27, 2017, for landfills that commenced construction, modification, or reconstruction after July 17, 2014 but before August 29, 2016; or
    - (ii) 365 days after the date of commenced construction, modification, or reconstruction for landfills that commence construction, modification, or reconstruction after August 29, 2016.
  - (8) Subsequent annual reports must contain items in paragraph (l)(1) through (6) of this section for the 365-day period following the 365-day period included in the previous annual report, and the report must be submitted no later than 365 days after the date the previous report was submitted.
  - (9) Landfills in the closed landfill subcategory are exempt from reporting requirements contained in paragraphs (l)(1) through (7) of this section.
  - (10) Landfills may cease annual reporting of items in paragraphs (l)(1) through (6) of this section once they have submitted the closure report in §60.38f(f).
- (m) *Tier 4 notification.*
- (1) The owner or operator of an affected landfill with a design capacity equal to or greater than 2.5 million megagrams and 2.5

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1A**

million cubic meters must provide a notification of the date(s) upon which it intends to demonstrate site-specific surface methane emissions are below 500 parts per million methane, based on the Tier 4 provisions of §60.35f(a)(6). The landfill must also include a description of the wind barrier to be used during the SEM in the notification. Notification must be postmarked not less than 30 days prior to such date.

- (2) If there is a delay to the scheduled Tier 4 SEM date due to weather conditions, including not meeting the wind requirements in §60.35f (a)(6)(iii)(A), the owner or operator of a landfill shall notify the Administrator by email or telephone no later than 48 hours before any known delay in the original test date, and arrange an updated date with the Administrator by mutual agreement.

**C. Particulate Matter from Materials Handling and Construction**

See Reporting Section 1.4.C.

The WCCLF will be subject to the following requirements, if it's calculated NMOC emissions increase to 55 tons/yr or more:

**Table IV – 1B**

**1B.1 Applicable Standards/Limits:**

**Subpart AAAA – National Emission Standard for Hazardous Air Pollutants: Municipal Solid Waste Landfills.**

**Applicability**

"You are subject to this subpart if you own or operate a MSW landfill that has accepted since November 8, 1987 or has additional capacity for waste disposition and meets any one of the three criteria in paragraphs (a)(1) through (3) of this section: (3) Your MSW landfill is an area source landfill that has a design capacity equal to or greater than 2.5 million megagrams (Mg) and 2.5 million cubic meters (m<sup>3</sup>) and has estimated uncontrolled emissions equal to or greater than 50 megagrams per year (Mg/yr) NMOC as calculated according to §60.754(a) of the MSW landfills new source performance standards in 40 CFR part 60, subpart WWW, the Federal plan, or an EPA approved and effective State or tribal plan that applies to your landfill." **[Reference: 40.CFR §63.1935(a)(3)]**

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 1B**

|      |   |
|------|---|
|      | <p>“If your landfill is an existing affected source and is an area source meeting the criteria in §63.1935(a)(3), you must comply with the requirements in §§63.1955(b) and 63.1960 through 63.1980 by the date your landfill is required to install a collection and control system by 40 CFR 60.752(b)(2) of subpart WWW, the Federal plan, or EPA approved and effective State or tribal plan that applies to your landfill or by January 16, 2004, whichever occurs later.” <b>[Reference: 40.CFR §63.1945(f)]</b></p> <p><b><u>Standards</u></b></p> <p>“If you are required by 40 CFR 60.752(b)(2) of subpart WWW, the Federal plan, or an EPA approved and effective State or tribal plan to install a collection and control system, you must comply with the requirements in §§63.1960 through 63.1985 and with the general provisions of this part specified in table 1 of this subpart.” <b>[Reference: 40.CFR §63.1955(b)]</b></p> <p><b><u>General and Continuing Compliance Requirements</u></b></p> <p>“Compliance is determined in the same way it is determined for 40 CFR Part 60, Subpart WWW, including performance testing, monitoring of the collection system, continuous parameter monitoring, and other credible evidence. In addition, continuous parameter monitoring data, collected under 40 CFR 60.756(b)(1), (c)(1), and (d) of Subpart WWW, are used to demonstrate compliance with the operating conditions for control systems. If a deviation occurs, you have failed to meet the control device operating conditions described in this subpart and have deviated from the requirements of this subpart. Finally, you must develop and implement a written SSM plan according to the provisions in 40 CFR 63.6(e)(3). A copy of the SSM plan must be maintained on site. Failure to write, implement or maintain a copy of the SSM plan is a deviation from the requirements of this subpart.” <b>[Reference: 40.CFR §63.1960]</b></p> |
| 1B.2 | <p><b><u>Testing Requirements:</u></b></p> <p>See <b><u>General and Continuing Compliance Requirements</u></b></p>  |
| 1B.3 | <p><b><u>Monitoring Requirements:</u></b></p> <p>See <b><u>General and Continuing Compliance Requirements</u></b></p>   |
| 1B.4 | <p><b><u>Record Keeping Requirements:</u></b></p>   |

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

| <b>Table IV – 1B</b> |   |
|----------------------|---|
|                      | <p>“Keep records and reports as specified in 40 CFR Part 60, Subpart WWW, or in the Federal plan, EPA approved State plan or tribal plan that implements 40 CFR Part 60, Subpart Cc, whichever applies to your landfill, with one exception: You must submit the annual report described in 40 CFR 60.757(f) <b>every 6 months.</b>” <b>[Reference: 40.CFR §63.1980(a)]</b></p> <p>“You must also keep records and reports as specified in the general provisions of 40 CFR Part 60 and this part as shown in Table 1 of this subpart. Applicable records in the general provisions include items such as SSM plans and the SSM plan reports.” <b>[Reference: 40.CFR §63.1980(b)]</b></p> |
| <b>1B.5</b>          | <p><b><u>Reporting Requirements:</u></b></p> <p>See Record-keeping Requirements.</p>  |

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

| <b>Table 1 to Subpart AAAA of Part 63 – Applicability of NESHAP General Provisions to Subpart AAAA.</b> |   |  |
|---|---|--|
| <b>Part 63 Citation</b>   | <b>Description</b>  | <b>Explanation</b>   |
| 63.1(a)   | Applicability: general applicability of NESHAP in this subpart  | Affected sources are already subject to the provisions of paragraphs (a)(10) - (12) through the same provisions under 40 CFR, Part 60, Subpart A.    |
| 63.1(b)   | Applicability determination for stationary sources  |  |
| 63.1(e)   | Title V permitting  |  |
| 63.2  | Definitions   |  |
| 63.4  | Prohibited activities and circumvention   | Affected sources are already subject to the provisions of paragraph (b) through the same provisions under 40 CFR, Part 60, Subpart A.                |
| 63.5(b)   | Requirements for existing, newly constructed, and reconstructed sources   |  |
| 63.6(e)   | Operation and maintenance requirements, start-up, shutdown and malfunction plan provisions  |  |
| 63.6(f)   | Compliance with non opacity emission standards  | Affected sources are already subject to the provisions of paragraphs (f)(1) and (2)(i) through the same provisions under 40 CFR, Part 60, Subpart A. |
| 63.10(b)(2)(i) – (b)(2)(v)  | General recordkeeping requirements  |  |
| 63.10(d)(5)   | If actions taken during start-up, shutdown and malfunction are consistent with the procedures in the startup, shutdown and malfunction plan, this information shall be included in a semi-annual startup, shutdown and malfunction plan report. Any time an action taken during a startup, shutdown and malfunction plan is not consistent with the startup, shutdown and malfunction plan, the source shall report actions taken with 2 working days after commencing such actions, followed by a letter 7 days after the event. |  |
| 63.12(a)  | These provisions do not preclude the State from adopting and  |  |

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

| <b>Table 1 to Subpart AAAA of Part 63 – Applicability of NESHAP General Provisions to Subpart AAAA.</b> |  |                    |
|---|--|--------------------|
| <b>Part 63 Citation</b>   | <b>Description</b>   | <b>Explanation</b> |
|   | enforcing any standard, limitation, etc; requiring permits or requiring emissions reductions in excess of those specified. |                    |
| 63.15   | Availability of information and confidentiality.   |                    |

| <b>Table IV – 2</b> |  |
|---------------------|--|
| <b>2.0</b>          | <p><b><u>Emissions Unit Number(s): EU02</u></b></p> <p>Fugitive dusts from facility haul roads (both paved and unpaved). Most of the traffic along the haul roads is from the movement of refuse disposal trucks to the landfill's active face, and to the waste transfer facility.</p>  |
| <b>2.1</b>          | <p><b><u>Applicable Standards/Limits:</u></b></p> <p><b><u>Control of Particulate Matter</u></b><br/> <b><u>Particulate Matter from Material Handling and Construction –</u></b><br/> <b><u>[COMAR 26.11.06.03D]</u></b><br/>         "A person may not cause or permit any material to be handled, transported, or stored, or a building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne."</p>   |
| <b>2.2</b>          | <p><b><u>Testing Requirements:</u></b></p> <p>See monitoring requirements in Section 2.3.</p>  |
| <b>2.3</b>          | <p><b><u>Monitoring Requirements:</u></b></p> <p>The Permittee shall continue implementing the existing preventive maintenance plan that is used to prevent particulate matter from becoming airborne. The Permittee shall perform maintenance activities within the time frames established in the plan and shall maintain a log with records of the dates and description of the maintenance that was performed. The Permittee shall perform a semi-annual (every 6 months) inspection of the operation to verify that the reasonable precautions (BMPs) are being implemented.<br/> <b>[Reference: COMAR 26.11.03.06C].</b></p> |

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

| Table IV – 2 |   |
|--------------|---|
| <b>2.4</b>   | <p><b><u>Record Keeping Requirements:</u></b></p> <p>The Permittee shall maintain a copy of the preventive maintenance plan and a record of the dates and the description of the maintenance activity performed. The Permittee shall maintain records of the inspections conducted for a period of at least five years and make available to the Department upon request. [Reference: COMAR 26.11.03.06C]</p> |
| <b>2.5</b>   | <p><b><u>Reporting Requirements:</u></b></p> <p>See Section 2.4.</p>  |

| Table IV – 2 |  |
|--------------|--|
| <b>3.0</b>   | <p><b><u>Emissions Unit Number(s) – EU-02 Enclosed Flare</u></b></p> <p>One (1) 1,500-standard cubic feet per minute (scfm) enclosed flare. [MDE Reg. No. 9-0080]</p>  |
| <b>3.1</b>   | <p><b><u>Applicable Standards/Limits:</u></b></p> <p><b>A. <u>Control of Visible Emissions – [COMAR 26.11.06.02C(2)]</u></b><br/>         “In Areas I, II, V and VI, a person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is greater than 20 percent opacity.”</p> <p><b>Exception – [COMAR 26.11.06.02A(2)]</b><br/>         “The visible emissions standards in C of this regulation do not apply to emissions during start-up and process modification or adjustments, or occasional cleaning of control equipment, if: (a) The visible emissions are not greater than 40 percent opacity; and (b) The visible emissions do not occur for more than 6 consecutive minutes in any 60-minute period.”</p> <p><b>B. <u>Control of Particulate Matter</u></b><br/> <b><u>Particulate Matter from Confined Sources – [COMAR 26.11.06.03B(2)(a)]</u></b><br/>         “A person may not cause or permit to be discharged into the outdoor</p> |

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 2**

atmosphere from any other installation, particulate matter in excess of 0.03 gr/SCFD (68.7 mg/dscm).”

**Particulate Matter from Materials Handling and Construction – [COMAR 26.11.06.03D]**

“A person may not cause or permit any material to be handled, transported, or stored, or a building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne.”

**C. Operational Limit**

**Air Standards**

“A control system designed and operated to reduce NMOC by 98 weight-percent, or, when an enclosed combustion device is used for control, to either reduce NMOC by 98 weight percent or reduce the outlet NMOC concentration to less than 20 parts per million by volume, dry basis as hexane at 3 percent oxygen. The reduction efficiency or parts per million by volume shall be established by an initial performance test to be completed no later than 180 days after the initial startup of the approved control system using the test methods specified in §60.754(d).” **[Reference: 40 CFR §60.752(b)(2)(iii)B]**

“The control device shall be operated with the parameter ranges established during initial or most recent performance test. The operating parameters to be monitored as specified in 60.756.” **[Reference: 40 CFR §60.752(b)(2)(iii)B]**

**3.2 Testing Requirements:**

**A. Control of Visible Emissions**

See monitoring requirements.

**B. Control of Particulate Matter**

See monitoring requirements.

**C. Operational Limit**

“For the performance test required in §60.752(b)(2)(iii)(B), Method 25, 25C, or Method 18 of Appendix A of this part must be used to determine compliance with the 98 weight-percent efficiency or the 20 ppmv outlet concentration level, unless another method to demonstrate compliance has been approved by the Administrator as provided by §60.752(b)(2)(i)(B). Method 3 or 3A shall be used to determine oxygen

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 2**

|     |   |
|-----|---|
|     | <p>for correcting the NMOC concentration as hexane to 3 percent. In cases where the outlet concentration is less than 50 ppm NMOC as carbon (8 ppm NMOC as hexane), Method 25A should be used in place of Method 25. If using Method 18 of appendix A of this part, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The following equation shall be used to calculate efficiency:<br/>Control Efficiency = <math>(\text{NMOC}_{\text{in}} - \text{NMOC}_{\text{out}}) / (\text{NMOC}_{\text{in}})</math><br/>where,<br/>NMOC<sub>in</sub> = mass of NMOC entering control device<br/>NMOC<sub>out</sub> = mass of NMOC exiting control device”<br/><b>[Reference: 40 CFR §60.754(d)]</b></p>                        |
| 3.3 | <p><b><u>Monitoring Requirements:</u></b></p> <p><b>A. <u>Control of Visible Emissions</u></b><br/>The Permittee shall properly operate and maintain the flare in a manner to minimize visible emissions. <b>[Reference: COMAR 26.11.03.06C]</b></p> <p><b>B. <u>Control of Particulate Matter</u></b><br/>The Permittee shall perform preventive maintenance once per month or as recommended by the equipment manufacturer on the flare. <b>[Reference: COMAR 26.11.03.06C]</b></p> <p><b>C. <u>Operational Limit</u></b><br/><u>Air Standards</u><br/>“Each owner or operator seeking to comply with §60.752(b)(2)(iii) using an enclosed combustor shall calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment.” <b>[Reference: 40 CFR §60.756(b)]</b></p> |
| 3.4 | <p><b><u>Record Keeping Requirements:</u></b></p> <p><b>A. <u>Control of Visible Emissions</u></b><br/>The Permittee shall retain records of preventive maintenance on site for at least five years and make these records available to the Department upon request. <b>[Reference: COMAR 26.11.03.06C]</b></p> <p><b>B. <u>Control of Particulate Matter</u></b><br/>The Permittee shall maintain a log of the maintenance performed on the flare and make the logs available to the Department upon request. <b>[Reference: COMAR 26.11.03.06C]</b></p>   |

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

| <b>Table IV – 2</b> |   |
|---------------------|---|
|                     | <p><b><u>C. Operational Limit</u></b><br/><b><u>Air Standards</u></b><br/>“Except as provided in §60.752(b)(2)(i)(B), each owner or operator of a controlled landfill shall keep up-to-date, readily accessible records for the life of the control equipment of the data listed in paragraphs (b)(1) through (b)(4) of this section as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of 5 years. Records of the control device vendor specifications shall be maintained until removal.” <b>[Reference: 40 CFR §60.758(b)]</b></p> |
| <b>3.5</b>          | <p><b><u>Reporting Requirements:</u></b></p> <p><b><u>A. Control of Visible Emissions</u></b><br/>The Permittee shall report incidents of visible emissions in accordance with Permit Condition 4, Section III, Plant Wide Condition, “Report of Excess Emissions and Deviations.</p> <p><b><u>B. Control of Particulate Matter</u></b><br/>Same as Section 3.5.A.</p> <p><b><u>C. Operational Limit</u></b><br/>Same as Section 3.5.A.</p>   |

A permit shield shall cover the applicable requirements identified for the emission units listed in the table above.

| <b>Table IV – 4</b> |  |
|---------------------|--|
| <b>4.0</b>          | <p><b><u>Emissions Unit Number(s) – EU-04 Tub Grinder</u></b></p> <p>EU-04 One (1) Morbark tub grinder, powered by a 540 bhp diesel engine (Caterpillar C-15). <b>[MDE Reg. No. 9-0102]</b></p>  |
| <b>4.1</b>          | <p><b><u>Applicable Standards/Limits:</u></b></p> <p><b><u>A. Control of Visible Emissions</u></b><br/><b>FOR GRINDING PROCESS ONLY</b><br/><b>(1) <u>Visible Emissions Standards</u> – [COMAR 26.11.06.02C(2)]</b><br/>“In Areas I, II, V and VI, a person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is greater than 20 percent</p> |

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 4**

opacity.”

**Exceptions – [COMAR 26.11.06.02A(2)]**

“The emission standards in § C of this regulation do not apply to emissions during start-up and process modifications or adjustments, or occasional cleaning of control equipment, if:

- i. The visible emissions are not greater than 40 percent opacity; and
- ii. The visible emissions do not occur for more than 6 consecutive minutes in any 60 minutes period.”

**FOR ENGINE ONLY**

**(2) Visible Emissions Limits for Stationary Internal Combustion Engine Powered Equipment – [COMAR 26.11. 09.05E]**

- (1) “Emissions During Idle Mode. A person may not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity.
- (2) Emissions During Operating Mode. A person may not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity.
- (3) Exceptions.
  - (a) Section E(2) does not apply for a period of 2 consecutive minutes after a period of idling of 15 consecutive minutes for the purpose of clearing the exhaust system.
  - (b) Section E(2) does not apply to emissions resulting directly from cold engine start-up and warm-up for the following maximum periods:
    - (i) Engines that are idled continuously when not in service: 30 minutes;
    - (ii) All other engines: 15 minutes.
  - (c) Section E(2) and (3) does not apply while maintenance, repair, or testing is being performed by qualified mechanics.”

**FOR ENGINE ONLY**

**B. Control of Sulfur Oxides Emissions – [COMAR 26.11. 09.07A(1)]**

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

| <b>Table IV – 4</b> |   |
|---------------------|---|
|                     | <p>“A person may not burn, sell, or make available for sale any fuel with a sulfur content by weight in excess of or which otherwise exceeds the following limitations:</p> <p>(c) Distillate fuel oils, 0.3 percent;”</p> <p><b>C. <u>Operational Limit</u></b><br/>The engine powering the tub grinder shall operate no more than 1,000 hours for any 12-month rolling period.</p>  |
| <b>4.2</b>          | <p><b><u>Testing Requirements:</u></b></p> <p><b>A. <u>Control of Visible Emissions</u></b><br/><b>FOR GRINDING PROCESS ONLY</b></p> <p>(1) <b><u>Visible Emissions Standards.</u></b><br/>See Monitoring Requirements in Section 4.3.</p> <p><b>FOR ENGINE ONLY</b></p> <p>(2) <b><u>Visible Emissions Limits for Stationary Internal Combustion Engine Powered Equipment</u></b><br/>See Monitoring Requirements in Section 4.3.</p> <p><b>FOR ENGINE ONLY</b></p> <p><b>B. <u>Control of Sulfur Oxides Emissions</u></b><br/>See Monitoring Requirements in Section 4.3.</p> <p><b>C. <u>Operational Limit</u></b><br/>See Monitoring Requirements in Section 4.3.</p> |
| <b>4.3</b>          | <p><b><u>Monitoring Requirements:</u></b></p> <p><b>A. <u>Control of Visible Emissions</u></b><br/><b>FOR GRINDING PROCESS ONLY</b></p> <p>(1) <b><u>Visible Emissions Standards</u></b><br/>The Permittee shall properly operate and maintain the tub grinder in a manner to minimize visible emissions. <b>[Reference: COMAR 26.11.03.06C]</b></p> <p><b>FOR ENGINE ONLY</b></p> <p>(2) <b><u>Visible Emissions Limits for Stationary Internal Combustion Engine Powered Equipment</u></b><br/>The Permittee shall properly operate and maintain engines in a manner to minimize visible emissions. <b>[Reference: COMAR</b></p>  |

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**Table IV – 4**

|            |   |
|------------|---|
|            | <p style="text-align: center;"><b>26.11.03.06C]</b></p> <p><b>FOR ENGINE ONLY</b></p> <p><b>B. <u>Control of Sulfur Oxides Emissions</u></b><br/>The Permittee shall obtain a certification from the fuel supplier indicating that the fuel oil complies with the limitation on sulfur content of the fuel oil. <b>[Reference: COMAR 26.11.03.06C].</b></p> <p><b>C. <u>Operational Limit</u></b><br/>The Permittee shall properly monitor the operating hours for the engine powering the tub grinder. <b>[Reference: PTC 047-00112-9-0102]</b></p>  |
| <b>4.4</b> | <p><b><u>Record Keeping Requirements:</u></b></p> <p><b>A. <u>Control of Visible Emissions</u></b><br/><b>FOR GRINDING PROCESS ONLY</b></p> <p>(1) <b><u>Visible Emissions Standards</u></b><br/>The Permittee shall retain records of preventive maintenance on site for at least five years and make these records available to the Department upon request. <b>[Reference: COMAR 26.11.03.06C]</b></p> <p><b>FOR ENGINE ONLY</b></p> <p>(2) <b><u>Visible Emissions Limits for Stationary Internal Combustion Engine Powered Equipment</u></b><br/>The Permittee shall retain records of preventive maintenance on site for at least five years and make these records available to the Department upon request. <b>[Reference: COMAR 26.11.03.06C]</b></p> <p><b>FOR ENGINE ONLY</b></p> <p><b>B. <u>Control of Sulfur Oxides Emissions</u></b><br/>The Permittee shall retain annual fuel supplier certifications stating that the fuel oil is in compliance with this regulation must be maintained for at least five years. <b>[Reference: COMAR 26.11.09.07C]</b></p> <p><b>C. <u>Operational Limit</u></b><br/>The Permittee shall maintain for at least five (5) years, and shall make available to the Department upon request, records of the following information:</p> <p>(a) Operating hours for the engine that drives the tub grinder.</p> <p>(b) The Permittee shall report the amount of fuel oil combusted and engine operating hours as part of the annual emission certification.</p> |

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

| <b>Table IV – 4</b>                             |  |
|---|--|
| <b>[Reference: MDE PTC No. 047-0112-9-0102]</b> |  |
| <b>4.5</b>                                      | <p><b><u>Reporting Requirements:</u></b></p> <p><b>A. <u>Control of Visible Emissions.</u></b><br/><b>FOR GRINDING PROCESS ONLY</b></p> <p>(1) <b><u>Visible Emissions Standards</u></b><br/>The Permittee shall retain report incidents of visible emissions in accordance with Permit Condition 4, Section III, Plant Wide Condition, "Report of Excess Emission and Deviations."</p> <p><b>FOR ENGINE ONLY</b></p> <p>(2) <b><u>Visible Emissions Limits for Stationary Internal Combustion Engine Powered Equipment</u></b><br/>The Permittee shall retain report incidents of visible emissions in accordance with Permit Condition 4, Section III, Plant Wide Condition, "Report of Excess Emission and Deviations."</p> <p><b>B. <u>Control of Sulfur Oxides Emissions</u></b><br/>The Permittee shall report annual fuel supplier certification to the Department upon request. <b>[Reference: COMAR 26.11.09.07C]</b></p> <p><b>C. <u>Operational Limit</u></b><br/>The Permittee shall report amount of fuel oil combusted and engine-operating hours as part of the annual emission certification.<br/><b>[Reference: COMAR 26.11.06.03C]</b></p> |

A permit shield shall cover the applicable requirements identified for the emission units listed in the table above.

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**SECTION V      INSIGNIFICANT ACTIVITIES**

This section provides a list of insignificant emissions units that were reported in the Title V permit application. The applicable Clean Air Act requirements, if any, are listed below the insignificant activity.

- (1) No. 2      Stationary internal combustion engines with an output less than 500 brake horsepower (373 kilowatts) and which are not used to generate electricity for sale or for peak or load shaving;

The one (1) 6 Hp gasoline powered small portable emergency generator, and one (1) grinder-shredder powered by a 425 Hp diesel (Caterpillar, C-12) engine are subject to the following requirements:

The two (2) are subject to the following requirements:

- (A) COMAR 26.11.09.05E(2) – Emissions During Idle Mode. The Permittee may not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity.
- (B) COMAR 26.11.09.05E(3) – Emissions During Operating Mode. The Permittee may not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity.
- (C) Exceptions:
- (i) COMAR 26.11.09.05E(2) does not apply for a period of 2 consecutive minutes after a period of idling of 15 consecutive minutes for the purpose of clearing the exhaust system.
- (ii) COMAR 26.11.09.05E(2) does not apply to emissions resulting directly from cold engine start-up and warm-up for the following maximum periods:
- (a) Engines that are idled continuously when not in service: 30 minutes
- (b) all other engines: 15 minutes.

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

(iii) COMAR 26.11.09.05E(2) & (3) do not apply while maintenance, repair or testing is being performed by qualified mechanics.

- (2) No. 10 Fuel burning equipment using gaseous fuels or no. 1 or no. 2 fuel oil, and having a heat input less than 1,000,000 Btu (1.06 gigajoules) per hour;

The fuel burning units are subject to the following requirements:  
COMAR 26.11.09.05A(1) – Fuel Burning Equipment.

“In Areas I, II, V and VI, a person may not cause or permit the discharge of emissions from any fuel burning equipment, other than water in an uncombined form, which is greater than 20 percent opacity.”

COMAR 26.11.09.05A(3) Exceptions: “Sections A(1) and (2) of this regulation do not apply to emissions during load changing, soot blowing, start-up, or adjustments or occasional cleaning of control equipment if: (a) The visible emissions are not greater than 40 percent opacity; and (b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty minute period.”

COMAR 26.11.09.07A(1) – Control of Sulfur Oxides from Fuel Burning Equipment.

“A person may not burn, sell, or make available for sale any fuel with a sulfur content by weight in excess of or which otherwise exceeds the following limitations: (c) Distillate fuel oils, 0.3 percent.”

- (3) Containers, reservoirs, or tanks used exclusively for:

(a) No. 1 Storage of Numbers 1, 2, 4, 5, and 6 fuel oil and aviation jet engine fuel;

(b) No. 2 Storage of lubricating oils

- (4) X Space heaters utilizing direct heat transfer and used solely for comfort heat;

**WORCESTER COUNTY CENTRAL LANDFILL  
7091 CENTRAL SITE LANE  
NEWARK, MARYLAND 21863  
PART 70 OPERATING PERMIT NO. 24-047-00112**

**SECTION VI STATE-ONLY ENFORCEABLE CONDITIONS**

The Permittee is subject to the following State-only enforceable requirements:

1. Applicable Regulations:

- (A) COMAR 26.11.06.08 and 26.11.06.09, which generally prohibit the discharge of emissions beyond the property line in such a manner that a nuisance or air pollution is created.
- (B) COMAR 26.11.15.06, which prohibits the discharge of toxic air pollutants to the extent that such emissions will unreasonably endanger human health

2. Record Keeping and Reporting:

The Permittee shall submit to the Department, by April 1 of each year during the term of this permit, a written certification of the results of an analysis of emissions of toxic air pollutants from the Permittee's facility during the previous calendar year. The analysis shall include either:

- (a) a statement that previously submitted compliance demonstrations for emissions of toxic air pollutants remain valid; or
- (b) a revised compliance demonstration, developed in accordance with requirements included under COMAR 26.11.15 & 16, that accounts for changes in operations, analytical methods, emissions determinations, or other factors that have invalidated previous demonstrations.

