



GOVERNMENT OF PUERTO RICO  
DEPARTMENT OF NATURAL AND ENVIRONMENTAL RESOURCES

DRAFT TITLE V OPERATING PERMIT  
AIR QUALITY AREA  
DEPARTMENT OF NATURAL AND ENVIRONMENTAL RESOURCES



<b>Permit Number:</b>	PFE-TV-4953-32-0621-0253
<b>Operating Permit Initial Renewal Application Received:</b>	June 17, 2021 <sup>1</sup>
<b>Issue and/or Effective Date:</b>	[DATE]
<b>Expiration Date</b>	[DATE]

In accordance with the provisions of Part VI of the Regulations for the Control of Atmospheric Pollution (RCAP) for Puerto Rico and the provisions of the 40 CFR Part 70 we authorize:

**MUNICIPALITY OF GUAYNABO LANDFILL  
GUAYNABO, PUERTO RICO**

hereinafter **MGL** or the **permittee**, to operate a stationary source of air pollutants emissions consisting of the units described in this permit. Until this permit expires, is modified or revoked, the permittee shall be able to emit atmospheric pollutants as a result of those processes and activities directly related and associated with the sources of emission, in compliance with the requirements, limitations and conditions of this permit, until its expiration date or until such is modified or revoked.

The conditions of the permit shall be enforceable by the federal and state government. Those requirements that are enforceable only by the state government shall be identified as such in the permit. A copy of the permit shall be kept on-site of the above named facility at all times.

<sup>1</sup> The initial application was amended on November 22, 2023, April 22, 2024, and April 26, 2024.

San José Industrial Park, 1375 Ave Ponce de León, San Juan, PR 00926

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## Section I - General Information

### A. Facility Information

Facility Name:	Municipality of Guaynabo Landfill
Physical Address:	State Road PR-834, Km 0.58 Barrio Mamey, La Muda Sector Guaynabo, Puerto Rico
Postal Address:	P.O. Box 7885 Guaynabo, PR.00970
Responsible Official:	Hon. Edward O'Neill Rosa Mayor, Municipality of Guaynabo
Responsible Official Phone:	787-720-4040
Operator Name:	Landfill Technologies, LLC
Postal Address:	P.O. Box 1322 Gurabo, P.R. 00778
Technical Contact Person:	Carlos Contreras Moreno President Landfill Technologies, LLC
Phone:	787-273-7639
Fax:	787-687-0337
Primary SIC Code:	4953

### B. Process Description

The Municipality of Guaynabo Landfill (**MGL**) is a closed non-hazardous solid waste municipal landfill that stopped receiving waste on May 5, 2008. The total of deposited waste was 2.815 million megagrams with NMOC emissions of 21.19 megagrams per year. The **MGL** is located on State Road PR-834, Km 0.58 in Guaynabo, Puerto Rico. Landfill Technologies, LLC administers the Municipal of Guaynabo Landfill.

When the landfill received the garbage, the solid waste was dumped from the transportation vehicle, spread and compacted by a garbage compactor. The closure and the post-closure care include the landfill cover and long-term care provisions of the closed landfill. Closing a municipal sanitary landfill system, requires the landfill cover system to be made of an infiltration layer and coated by an erosion layer.

The vehicles and equipment operating in the landfill will be only the following: trucks and equipment (e.g. lawn mower) used by the maintenance personnel, and equipment to maintain the landfill closure and the movement of vehicles to weight, inspect and transport the recycling materials to the Recycling Plant and waste to the Transfer Station located in the **MGL** facilities for later transfer to another sanitary landfill system.

The decomposition of the encapsulated waste in the solid waste municipal landfill produces gases (greenhouse gases), such as methane (CH<sub>4</sub>), carbon dioxide (CO<sub>2</sub>) and other non-methane organic compounds (NMOC).

The facility has three electricity generators that consume diesel as fuel, two of these generators EU-6 and EU-7 in emergency engine category and the stationary internal combustion engine EU-5 in non-emergency engine category. The facility has two compression ignition internal combustion engines in two fire pumps (EU-3 y EU-4) that consume diesel as fuel.

The landfill is subject to the applicable requirements listed in Part VII - Emission Guidelines for Municipal Sanitary Landfill Systems of the RCAP. The **MGL** is required to have a Title V Operating permit because the design capacity of the landfill is greater than 2.5 million megagrams (Mg) and 2.5 million cubic meters (m<sup>3</sup>). The landfill is a minor source of emissions of criteria pollutants, hazardous air pollutants and greenhouse gases (GHGs) expressed as CO<sub>2</sub>e.

**Section II – Emission Units Description**

The emission units regulated under this permit are:

Emission Unit	Description	Control Equipment
EU-1	<p style="text-align: center;"><b>Closed Municipal Sanitary Landfill System</b></p> <p>The landfill has accepted municipal solid waste since 1973 and it closed in 2008. The total of deposited waste was 2.815 million megagrams (3,096,314 tons of waste) during its active period. The NMOC emission rate is 21.19 Mg/year (23.36 tons/year) as determined through the Tier 2<sup>2</sup>.</p>	None
EU-3	<p style="text-align: center;"><b>Fire Pump Engine</b></p> <p>Clarke fire pump engine  Manufacturer: John Deere Co.  Model: 4045TF220  Capacity: 106 hp  Consumes diesel at a rate of 3.1 gallons per hour.  Model year: 01/2005  Category: Emergency  40 CFR Part 63, Subpart ZZZZ</p>	None

<sup>2</sup> Based on the results of the performance tests approved on June 6, 2022.

Emission Unit	Description	Control Equipment
EU-4	<p align="center"><b>Fire Pump Engine</b></p> Clarke fire pump engine Manufacturer: John Deere Co. Model: 4045TF220 Capacity: 85 hp Consumes diesel at a rate of 2.7 gallons per hour. Model year: October 31/2007 Engine Family: 7NONCERT Category: Emergency 40 CFR Part 60, Subpart IIII	None
EU-5	<p align="center"><b>Internal Combustion Engine</b></p> Caterpillar engine for electricity generator Model: C4.4 Engine power: 134.1 hp Consumes diesel at a rate of 7.4 gallons per hour. Model year: August 2021 Engine Family: MPKXL04.4NR1 Emission Strategy: EPA TIER III Category: Non-Emergency 40 CFR Part 60, Subpart IIII	None
EU-6	<p align="center"><b>Internal Combustion Engine</b></p> Caterpillar engine for electricity generator Model: C2.2 Engine power: 27 hp Consumes diesel at a rate of 1.7 gallons per hour. Model year: October 10, 2020 Engine family: LPKXL2.22NLC Category: Emergency 40 CFR Part 60, Subpart IIII	None
EU-7	<p align="center"><b>Internal combustion engine</b></p> Perkins engine for electricity generator Model: 1306-E87TA300 Engine power: 300 hp Consumes diesel at a rate of 13.4 gallons per hour. Model year: 2000 Category: Emergency 40 CFR Part 63, Subpart ZZZZ	None

**Section III – General Permit Conditions**

1. **Sanctions and Penalties:** The permittee must comply with all terms, conditions, requirements, limitations and restrictions established in this permit. Any violation to the terms of this permit is

subject to administrative, civil or criminal measures, as established in Section 16 of the Environmental Public Policy Act (Law No. 416 of September 22, 2004, as amended)<sup>3</sup>.

2. **Right of Entry:** As specified under Rules 103 and 603(c)(2) of the RCAP, the permittee shall allow the DNER or an authorized representative, upon presentation of credentials and other documents as may be required by law, to perform the following activities:
  - a. Enter upon the permittee's premises where an emission source is located or where emissions related activities are conducted, or where records must be kept under the conditions of this permit, under the RCAP, or under the Clean Air Act;
  - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit, under the RCAP, or under the Clean Air Act;
  - c. Inspect and examine any facility, equipment (including monitoring and air pollution control equipment), practices or operations (including QA/QC methods regulated or required under this permit; as well as sampling emissions of air quality and fuels; and
  - d. As authorized by the Clean Air Act and the RCAP, to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements.
3. **Sworn Statement or Affidavit:** All reports required pursuant Rule 103(D) of the RCAP (i.e., semiannual monitoring reports and annual compliance certifications should be submitted together with a sworn statement or affidavit by the Responsible Official or a duly authorized representative. Such sworn statement or affidavit shall attest to the truth, correctness and completeness of such records and reports.
4. **Data Availability:** As specified under Rule 104 of the RCAP, all emission data obtained by or submitted to the DNER, including data reported pursuant to Rule 103 of the RCAP, as well as that obtained in any other way, shall be available for public inspection and may also be made available to the public in any additional manner that the DNER may deem appropriate.

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<sup>3</sup> Pursuant to the Department of Natural and Environmental Resources Reorganization Plan of 2018, Act 171 of August 2, 2018, Section 28, the powers and functions previously delegated to the Environmental Quality Board, its Chairman and/or its Board of Governors by Act 416-2004, as amended, known as, "Environmental Public Policy Act", are transferred to the Department of Natural and Environmental Resources, to be executed by the Secretary. In addition, pursuant to Section 92 - Substitution Clause - any reference to the Environmental Quality Board contained in any law, regulation or official document of the Government of Puerto Rico shall be deemed amended to refer to the Department of Natural and Environmental Resources, which shall be deemed to be its successor for all corresponding legal purposes.

5. **Emergency Response Plan:** As specified under Rule 107(C) of the RCAP, every source that may release, emit or vent toxic or deleterious substances into the atmosphere shall prepare and submit to the DNER an Emergency Response Plan, according to the provisions of Section 2 of Rule 107(C) of the RCAP. As required by RCAP Rule 107(C)(3), the owner or operator must keep the Emergency Response Plan updated and all personnel involved must be trained and knowledgeable in the tasks and functions related to the Plan. The owner or operator must keep the Emergency Response Plan accessible to all involved and must present it to DNER representatives when required, as established in Rule 107(C)(4) of the RCAP.
  
6. **Compliance Certification:** As specified under Rule 602(c)(2)(ix)(C) of the RCAP, the permittee shall submit each year a compliance certification. This certification must be submitted to both the DNER and the Environmental Protection Agency (EPA)<sup>4</sup> no later than **April 1<sup>st</sup>**, covering the previous calendar year. The compliance certification shall include, but is not limited to, the information required under Rule 603(c) of the RCAP as follows:
  - a. The identification of each term or condition of the permit that is the basis of the certification; and
  - b. The compliance status. Each deviation shall be identified and taken into account in the compliance certification; and
  - c. A statement indicating whether the compliance was continuous or intermittent; and
  - d. The methods or other means used for determining the compliance status with each term and condition, currently and over the reporting period consistent with sections (a)(3)-(5) of Rule 603 of the RCAP; and
  - e. Identification of possible exceptions to compliance, any periods which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 (CAM) occurred; and
  - f. Such other facts as the Board may require to determine the compliance status of a source.
  
7. **Regulation Compliance:** As specified under Rule 115 of the RCAP, any violation to the RCAP, or to any other applicable rule or regulation, shall be grounds for the DNER to suspend, modify, or revoke any relevant permit, approval, variance or other authorization issued by the DNER.
  
8. **Location Approval:** As specified under Rule 201 of the RCAP, nothing in this permit shall be interpreted as authorizing the location or construction of a major stationary source, or the modification of a major stationary source, or a major modification of a significant source, without

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<sup>4</sup> The certification to the DNER shall be mailed to: Manager, Air Quality Area, San Jose Industrial Park 1375 Ave. Ponce de Leon, San Juan, P.R. 00926. The certification to the EPA shall be mailed to: Chief, Enforcement and Superfund Branch, CEPD, US EPA-Region II, City View Plaza-Suite 7000, #48 Rd.165 km 1.2 Guaynabo P.R. 00968-8069.

obtaining first a location approval from the Board and without first demonstrating compliance with the National Ambient Air Quality Standards (NAAQS). This permit does not allow the construction of new minor sources without the required permit under Rule 203 of the RCAP.

9. **Objectionable Odors:** As specified under Rule 420 of the RCAP, the permittee shall not cause or permit emissions to the atmosphere of any matter which produces an *objectionable* odor that can be perceived in an area other than that designated for industrial purposes. If objectionable odors are detectable beyond the property perimeter, and complaints are received, the permittee shall investigate and take measures to minimize and/or eliminate the objectionable odors, if necessary. [This condition is enforceable only by the State]
10. **Permit Renewal Applications:** As established under Rule 602 (a)(1)(iv) of the RCAP, the permittee shall submit a permit renewal application least 12 months prior to the date of permit expiration. A responsible official must certify all required applications consistent with paragraph (c)(3) of Rule 602 of the RCAP.
11. **Permit Duration:** As specified under Rule 603 of the RCAP, the following terms will apply during the duration of this permit:
  - a. **Expiration:** This authorization shall have a fixed term of five (5) years since the effective date. The expiration date will be automatically extended until the DNER approves or denies a renewal application (Rule 605(c)(4)(ii) of the RCAP) but only in those cases where the permittee submits a complete renewal application at least twelve (12) months before the expiration date. [Rules 603 (a)(2), 605 (c)(2), and 605(c)(4) of the RCAP]
  - b. **Permit Shield:** As specified under Rule 605(c)(4)(i) of the RCAP, the permit shield may be extended until the time the permit is renewed if a timely and complete renewal application is submitted.
  - c. In case that this permit is subject to any challenge by third parties, the permit shall remain in effect until the time it is revoked by a court of law with jurisdiction in the matter.
12. **Recordkeeping Requirement:** As established under Rule 603(a)(4)(ii) of the RCAP, the permittee shall retain records of all required monitoring data and support information for a period of five (5) years from the date of the monitoring sample, measurement, report, or application.
13. **Semiannual Monitoring Reports/Samplings:** As established under Rule 603(a)(5)(i) of the RCAP, the permittee shall submit reports to the DNER of all required monitoring every six (6) months, or more frequently if required by the Board or any other underlying applicable requirement. These reports cover two major elements. The first element is the summary of all periodic monitoring / sampling required in this permit. The second element requires that all deviations from permit conditions are clearly identified, summarized and reported to the DNER. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official as established under Rule 602(c)(3) of the RCAP.



The report covering the period from January through June shall be submitted no later than October 1<sup>st</sup> of the same year and the report covering the period from July through December shall be submitted no later than **April 1<sup>st</sup>** of the following year. Once the guidelines are developed by the DNER, the permittee must use them to complete these reports.

14. **Deviations Reporting due to Emergencies:** According to Rule 603(a)(5)(ii)(a) of the RCAP, any deviation resulting from an upset (such as sudden malfunction or break-down) or emergency conditions, as defined in Rule 603(e) of the RCAP, must be reported within the next 2 working days from the time the emission limits are exceeded due to the emergency.<sup>5</sup> If such emergency deviation last for more than 24 hours, the affected units may be operated until the end of the cycle or 48 hours, whichever occurs first. The DNER may only extend the operation of an emission source in excess of 48 hours, if the source demonstrates to the DNER satisfaction that the National Air Quality Standards have not been exceeded and that there is no risk to the public health.
15. **Deviation Reporting (Hazardous Air Pollutants):** The source shall act as specified in its Emergency Response Plan (established in Rule 107 (C) of the RCAP), when such Plan has shown no significant impact on an area other than those that have been designated for industrial purposes or will cease operations immediately if there is a significant impact on an area other than those that have been designated for industrial purposes (state-only enforceable condition). In accordance with Rule 603(a)(5)(ii)(b) of the RCAP, the DNER shall be notified within the next 24 hours if a deviation that results in the release of emissions of hazardous air pollutants for more than an hour in excess of the applicable limit occurs. For the discharge of any regulated air pollutant that continues for more than 2 hours in excess of the applicable limit, the permittee shall notify the DNER within 24 hours of the deviation. The permittee shall submit to the DNER, within 7 days of the deviation, a detailed written report which includes probable causes, time and duration of the deviation, remedial action taken and the steps you are following to prevent recurrence.
16. **Severability Clause:** As specified under Rule 603(a)(6) of the RCAP, the clauses in this permit are severable. In the event of a successful challenge to any portion of the permit in an administrative or judicial forum, or in the event any of its clauses is held to be invalid, all other portions of the permit shall remain valid and effective, including those related to emission limits, terms, and conditions, be they specific or general, as well as monitoring, record keeping and reporting requirements.
17. **Permit Noncompliance:** According to Rule 603(a)(7)(i) of the RCAP, the permittee must comply with all conditions of the permit. Permit noncompliance constitutes a violation of the RCAP and

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<sup>5</sup> On July 21, 2023, the EPA removed the emergency affirmative defense provisions from the Title V operating permit program regulations. It was determined that these provisions are inconsistent with the EPA's interpretation of the enforcement structure of the Clean Air Act. The final rule, which was published on the Federal Register on August 21, 2023, amended the provisions in 40 CFR §70.6. On August 21, 2024, the DNER asked EPA for an extension of time to remove the affirmative provisions from their Title V program, which requires amendments to Rule 603 of the RCAP.

will be grounds for taking the appropriate enforcement action, impose sanctions, revoke, terminate, modify, and/or reissue the permit, or to deny a permit renewal application.

18. **Defense not Allowed:** As specified under Rule 603(a)(7)(ii) of the RCAP, the permittee shall not allege as a defense in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
19. **Permit Modification and Revocation:** As specified under Rule 603(a)(7)(iii) of the RCAP, the permit may be modified, revoked, reopened, reissued, or terminated for cause according to the Law of Uniform Administrative Procedures. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
20. **Property Rights:** As specified under Rule 603(a)(7)(iv) of the RCAP, this permit does not convey any property rights of any sort, nor does it grant any exclusive privilege.
21. **Obligation to Furnish Information:** As specified under Rule 603(a)(7)(v) of the RCAP, the permittee shall furnish to the DNER, within a reasonable time, any information that the DNER may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the DNER copies of documents related to this permit.
22. **Changes in Operating Scenarios:** As specified in Rule 603(a)(10) of the RCAP, the permittee shall, contemporaneously with making a change from one operating scenario to another, to record in a log the scenario under which it is operating. This record shall be kept onsite at all times.
23. **Prohibition on Default Issuance:** As specified under Rule 605(d) of the RCAP, it shall never be considered that a permit has been issued by default as a result of the DNER's failure to take final action on a permit application within 18 months. The DNER's failure to issue a final permit within 18 months should be treated as a final action solely for the purpose of obtaining judicial review in a state court.
24. **Administrative Permit Amendments and Permit Modifications:** As specified under Rule 606 of the RCAP, the permit shall not be amended nor modified unless the permittee complies with the requirements for administrative permit amendments and permit modifications as described in the RCAP.
25. **Permit Reopening:** As specified under Rule 608(a)(1), this permit shall be reopened and revised under the following circumstances:
  - a. Whenever additional applicable requirements under any law or regulation become applicable to the permittee, when the remaining permit term is of 3 or more years. Such reopening shall be completed 18 months after promulgation of said applicable requirement. No such reopening is required if the effective date of the requirement is

later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to Rule 605(c)(4)(i) or Rule 605(c)(4)(ii) of the RCAP.

- b. Whenever the DNER or the EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit.
  - c. Whenever the DNER or the EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
26. **Changes in Name or Responsible Official:** This permit is issued to **Municipality of Guaynabo Landfill**. In the event that the company and/or facility change its name, the responsible official must submit an administrative amendment to this permit to reflect the change in name. In the event that the responsible official changes, the new responsible official must submit no later than 30 days after the change, an administrative amendment including a sworn statement in which he/she accepts and promises to comply with all the conditions of this permit.
27. **Changes in Ownership:** This permit is issued to **Municipality of Guaynabo Landfill**. In the event that the company and/or facility is transferred to a different owner or change operational control and the DNER determines that no other change in the permit is necessary, the new responsible official must submit an administrative amendment. The administrative amendment shall include a sworn statement in which the new responsible official accepts and promises to comply with all the conditions of this permit, and a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee. This is not applicable if the DNER determines that changes to the permit are necessary.
28. **Renovation Work/ Demolition:** The permittee shall comply with the provisions set forth in 40 CFR §61.145 and §61.150, and Rule 422 of the RCAP, and Regulations for the Processing of General Permits (General Permit for the Handling of Asbestos Containing Materials) when doing renovation or demolition activities of asbestos containing materials at the facility. The permittee is not authorized to receive asbestos containing materials in the sanitary landfill system.
29. **Risk Management Plan:** If during the effectiveness of this permit, the permittee is subject to the 40 CFR part 68, the permittee shall submit a Risk Management Plan according with the compliance schedule in the 40 CFR part 68.10. If during the effectiveness of this permit, the permittee is subject to the 40 CFR part 68, the permittee shall submit a compliance certification with the requirements of part 68 as part of the annual compliance certification required under 40 CFR part 70, including the recordkeeping and the Risk Management Plan.
30. **General Duty:** The permittee has the general obligation of identifying hazards which may result from accidental releases of any controlled substance under section 112(r) of the Clean Air Act or any other extremely hazardous substance in a process, using appropriate hazard assessment techniques, designing, maintaining, and operating a safe facility and minimizing the consequences

of accidental releases if they occur as required in section 112(r)(1) of the Act and Rule 107(D) of the RCAP.

**31. Requirements for Refrigerants (Climatologic and Stratospheric Ozone Protection):**

- a. In the event that the permittee has equipment or appliances, including air conditioning units, which use Class I or II refrigerants as defined in 40 CFR part 82, subpart A, Appendices A and B, the permittee shall take the necessary measures to ensure that all maintenance, service or repair services performed are done so according to the practices, certification and personnel requirements, disposition requirements, and recycling and/or recovery equipment certification requirements specified under 40 CFR part 82, subpart F.
- b. Owners/ operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR §82.166.
- c. Service on Motor Vehicles: If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, subpart B, Servicing of Motor Vehicle Air Conditioners. The term motor vehicle as used in subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term MVAC as used in subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo or system used on passenger buses using HCFC-22 refrigerant.

**32. Labeling of Products Using Ozone-Depleting Substances:** The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR part 82, subpart E.

- a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to 40 CFR §82.106.
- b. The placement of the required warning statement must comply with the requirements pursuant to 40 CFR §82.108.
- c. The form of the label bearing the required warning statement must comply with the requirements pursuant to 40 CFR §82.110.
- d. No person may modify, remove, or interfere with the required warning statement except as described in 40 CFR §82.112.

**33. Roof Surface Coating:** Pursuant to Rule 424 of the RCAP, the permittee shall not cause or permit the roof surface coating by applying hot tar or any other coating material containing organic compounds without previous notification to the DNER. The use of used oil or hazardous waste

for roof surface coating is prohibited. This rule will not apply to activities where tar or sealing material is applied without heat and such material is asbestos-free. [State enforceable only]

34. **Storage Tanks:** The permittee shall keep records of all fuel oil storage tanks showing the dimensions of each tank and an analysis showing the capacity of each tank. This documentation shall be readily available at any time for inspection of the DNER personnel and shall be kept onsite for the life of the tank.
35. **Compliance Clause:** Under no circumstances does compliance with this permit exempt the permittee from complying with all other applicable state or federal laws, regulations, permits, administrative orders or applicable court orders.
36. **Emissions Calculations:** The permittee shall submit, on or before **April 1<sup>st</sup>** of each year, the actual or permissible emissions calculations for the previous natural year. The emissions calculations shall be submitted on the forms prepared by the DNER for this purpose and the responsible official must certify all the information submitted as true, correct and representative of the permitted activity included in the permit.
37. **Annual Fee:** As specified under Rule 610 of the RCAP, the permittee must submit an annual payment based on the emissions calculations for each regulated pollutant. The payment will be based on their actual emissions at a rate of \$37.00 per ton, unless the Board decides otherwise as permitted under Rule 610(b)(2)(iv) of the RCAP. This payment for the previous year must be made on or before **June 30** of each year.
38. **New or Amendments Regulation:** Whether a federal or state regulation is promulgated or amended, and the facility is affected by it, the owner or operator shall comply with the requirements of the new or amended regulation. The DNER will provide a specified and reasonable period of time, so the permittee reach compliance with the amendments or new regulations.
39. **Reports:** Unless a permit condition establishes otherwise, any requirement of information submittal to the DNER shall be addressed to: Manager, Air Quality Area, San José Industrial Park 1375, Ave. Ponce de Leon, San Juan, Puerto Rico 00926.
40. **Reservation of Rights:** Except as expressly provided in this Title V permit:
  - a. Nothing herein shall prevent DNER or the EPA from taking administrative enforcement measures or seeking legal or equitable relief to enforce the terms of the Title V permits, including but not limited to the right to seek injunctive relief, and imposition of statutory penalties and/or fines.
  - b. Nothing herein shall be construed to limit the rights of the DNER or the EPA to undertake any criminal enforcement activity against the permittee or any person.

- c. Nothing herein shall be construed to limit the authority the DNER or the EPA to undertake any actions in response to conditions that present an imminent and substantial endangerment to public health or welfare, or the environment.
  - d. Nothing herein shall be construed to limit the permittee's rights to administrative hearing and judicial appeal of termination/ revocation/ disputes over modification/ denial actions in accordance with regulations and the Environmental Public Policy Act.
41. **Source Modifications without a permit revision:** The permittee may make changes to the source in accordance with paragraphs (a), (b) and (c) of Rule 607 of the RCAP, as follows:
- a. Source changes -
    - 1. Permitted sources may make Section 502(b)(10) changes without requiring a permit revision, if the changes are not modifications under any provision of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions).
      - i. For each such change, the facility must provide the Administrator and the DNER with written notification in advance of the proposed changes, which shall be seven (7) days. The written notification shall include a brief description of the change within the permitted facility, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change. The source, the Board, and EPA shall attach each such notice to their copy of the relevant permit.
      - ii. The permit shield described in paragraph (d) of Rule 603 shall not apply to any change made pursuant to section (a)(1) of Rule 607.
    - 2. Permitted sources may trade increases and decreases in emissions in the permitted facility for the same pollutant, where the permit provides for such emissions trades without requiring a permit revision and based on the 7-day notice prescribed in section (a)(2) of Rule 607. This provision is available in those cases where the permit does not already provide for such emissions trading.
      - i. Under paragraph (a)(2) of Rule 607, the written notification required shall include such information as may be required by the provision in the Puerto Rico State Implementation Plan (PR-SIP) authorizing the emissions trade, including when the proposed change will occur, a description of each such change, any change in emissions, the permit requirements with which the source will comply using the emissions trading provisions of the PR-SIP, and the pollutants emitted subject to the emissions trade. The

notice shall also refer to the provisions with which the source will comply in the PR- SIP and that provide for the emissions trade.

- ii. The permit shield described in paragraph (d) of Rule 603 shall not extend to any change made under section (a)(2) of Rule 607. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the applicable implementation plan authorizing the emissions trade.
3. If a permit applicant requests it, the Board shall issue permits that contain terms and conditions (including all terms required under sections (a) and (c) of Rule 603 to determine compliance) allowing for the trading of emissions increases and decreases in the permitted facility solely for the purpose of complying with a federally-enforceable emissions cap. Such a cap must be established in the permit independent of otherwise applicable requirements. The permit applicant shall include in its application proposed replicable procedures and permit terms that ensure the emissions trades are quantifiable and enforceable. The Board shall not be required to include in the emissions trading provisions any emissions units for which emissions are not quantifiable or for which there are no replicable procedures to enforce the emissions trades. The permit shall also require compliance with all applicable requirements.
  - i. Under section (a)(3) of Rule 607, the written notification required shall state when the change will occur and shall describe the changes in emissions that will result and how these increases and decreases in emissions will comply with the terms and conditions of the permit.
  - ii. The permit shield described in paragraph (d) of Rule 603 may extend to terms and conditions that allow such increases and decreases in emissions.
- b. Off-Permit Changes. The DNER may allow changes that are not addressed or prohibited by the permit and/or State Law.
  1. A permitted facility may make changes without obtaining a permit revision if such changes are not addressed or prohibited by the permit, other than those described in paragraph (c) of Rule 607.
    - i. Each such change shall meet all applicable requirements and shall not violate any existing permit term or condition.
    - ii. Sources must provide contemporaneous written notice to the DNER and EPA of each such change, except for changes that qualify as insignificant

under paragraph (c)(1) of Rule 602. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply because of the change.

- iii. The change shall not qualify for the shield under paragraph (d) of Rule 603.
  - iv. The permittee shall keep a record describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- c. A permitted facility cannot make changes without a permit revision if such changes are modifications under any provision of Title I of the Act.
42. a. The permittee may make changes under section 502(b)(10) of the Act without requiring a permit revision if such changes:
- 1. are not modifications under any provision of Title I of the Act,
  - 2. do not exceed the allowable emissions under the permit,
  - 3. do not result in the emission of any pollutant not previously emitted,
  - 4. do not violate any applicable requirement or contravene federally enforceable terms and permit conditions such as monitoring (including test methods), recordkeeping, reporting and compliance certification requirements,
  - 5. are not changes under Title I of the Act to an emission limit, a work practice or a voluntary emission cap.
- b. Rule 203 of the RCAP is required for any construction or modification of an emission source. For purposes of part II of the RCAP, a modification is defined as any physical change in, change in the method of operation or a change in type of fuel used of an existing stationary source, that would result in a net increase in that stationary source's potential to emit any air pollutant (subject to any standard), or which results in the emission of any pollutant (subject to an standard) not previously emitted. A physical change shall not include routine maintenance, repair and the replacement of any equipment having the same capacity, equal efficiency or greater environmental benefit to be used for the same purpose.



- c. The written notification addressed in condition 41(a)(1) refers to changes covered under condition 41(a)(1). Changes not covered will be processed under the requirements of Rule 203 of the RCAP.
- d. Any emission trading as provided in condition 41(a)(2) above will not be authorized if the facility does not provide the reference to the PR-SIP provisions authorizing such emissions trading.
- e. If the permittee requests so, the Board may allow the emission trading in the facility solely for the purpose of complying with a federally-enforceable emissions cap. The application shall be based in replicable procedures and shall include permit terms that ensure the emission trades are quantifiable, replicable and enforceable.
- f. Off-permit changes will not be exempt from complying with the requirements and procedures of Rule 203 of the RCAP, if applicable.

**Section IV - Allowable Emissions**

- A. The emissions described in the table below represent the allowable emissions at the time of the permit application and will be used only for payment purposes.

Pollutants	Allowable Emissions (tons/year)
PM <sub>10</sub>	3.16
SO <sub>2</sub>	0.74
NO <sub>x</sub>	4.42
CO	1.01
NMOC	15.95
VOC (combustion)	6.11
HAPs	3.48
CO <sub>2</sub> e	70,814.12

- B. According to EQB Resolution RI-06-02<sup>6</sup>, emission calculations shall be based on the actual emissions of source; although calculations based on the allowable emissions will be accepted. If **MGL** decides to perform calculations based on allowable emission, **MGL** shall pay the same per charge per ton as the facilities that decide to do the calculation based on actual emissions.

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<sup>6</sup> EQB Resolution – Payment Procedure for Title V operating charges and Title V operating charges and Title V permit renewal charges, issued on March 20, 2006.

- C. According to Rule 610(a) of the RCAP, when the source requests a modification, or minor administrative change to its Title V permit, the source will only pay the charges associated with increases in emissions (if any) per ton, based on the change and not based on the total fees paid previously paid according to Rule 610(a) of the RCAP.
- D. Pursuant to EQB Resolution R-04-04-1<sup>7</sup>, to determine the modification and renewal charges, **MGL** shall calculate allowable emission using factors  $k$ ,  $L_0$  and  $C_{NMOC}$  established under Rule 704(a) of the RCAP or specific  $k$  and  $C_{NMOC}$  values as determined under Rule 704(c) and (d) of the RCAP.
- E. According to EQB Resolution R-12-17-5<sup>8</sup>, those sources that must include or estimate GHG emission are exempt from payment for Greenhouse Gases (expressed as CO<sub>2</sub>e) in conformity with the Tailoring Rule for Title V permits until the Board issues a final determination stating the emission charges or any other charges if needed, or if Resolution R-12-17-5 is revoked, whichever comes first.

## Section V - Specific Permit Conditions

### A. Compliance with Rule 402 of the RCAP (Open Burning) for EU-1

- 1. According to Rule 402(D) of the RCAP, **MGL** shall not allow the open burning of refuse, tires or any other solid waste disposed in EU-1. In order to comply, **MGL** must prepare and obtain approval of the following operating procedures, within 90 days from the effective date of this permit:
  - a. A fire abatement plan to control any open burning in the property or by the sanitary landfill boundaries.
  - b. The fire abatement plan must have the concurrence of the State and Municipal Fire Department.

### B. Unit EU-1

- 1. The **MGL** shall not cause or permit the discharge of visible emissions of fugitive dust beyond the boundary line of the property on which the emissions originate. [Rule 404(B) of the RCAP]
- 2. The permittee shall perform daily visual observations during the Sanitary Landfill System (SLS) operation hours to determine compliance with the visible emissions limitations mentioned in condition B.1. of this section.

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<sup>7</sup> EQB Resolution – Consultation to the Government Board about the annual calculation of the gas emissions to the atmosphere for Sanitary Landfills, issued on February 27, 2004.

<sup>8</sup> EQB Resolution, PR Tailoring Requirements for Greenhouse Gases (GHGs) – Payment exemption issued on September 7, 2012.

3. The permittee shall keep records of the results of the daily visible observations. These records shall be kept on-site readily accessible at any time at the facility for the revision of technical personnel of DNER and EPA.
  4. The **MGL** shall employ dust suppression measures as needed to meet the emission limitation mentioned in condition B.1. of this section.
  5. The **MGL** shall record daily each use of dust suppression equipment for processes, which are manually operated and are intermittent. For example: operation of a water truck to spray roads. This record shall be kept readily accessible at any time at the facility for the revision of technical personnel of DNER and EPA.
  6. The **MGL** shall maintain at the SLS appropriate equipment for dust suppression and in working order at all times of operation of the SLS.
  7. The **MGL** shall cover, at all times when in motion, of open bodied trucks transporting materials likely to give rise to airborne dusts. [Rule 404(A)(4) of the RCAP]
  8. When reasonable, **MGL** shall pave the roadways and maintain them in a clean condition. [Rule 404(A)(6) of the RCAP]
  9. **MGL** shall promptly remove earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, by erosion by water or by other means. [Rule 404(A)(7) of the RCAP]
  10. Every area, lot, or part of a piece of land intended for parking with a capacity greater than 900 square feet must be paved with concrete, asphalt, equivalent hard surface or chemical stabilization on all its access and internal roads where unpaved traffic adjoin paved roadways and parking areas. [Rule 404(D) of the RCAP]
  11. **MGL** shall keep all required records and support information for a period of 5 years from the date of the record.
- C. Emission Guidelines for Municipal Sanitary Landfill Systems Conditions (Part VII of the RCAP) - [EU-1]<sup>9</sup>**
1. **MGL** shall comply with the provisions in Part VII of the RCAP.
  2. **MGL** must comply with the following requirements:

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<sup>9</sup> Note that the applicable state or federal requirement appears on the right margin immediately below the requirement.

- a. Submit an annual emissions report to the DNER or an estimate of the NMOC emission rate for the next 5 years period in compliance with Rule 707(b)(1)(ii) of the RCAP; and  

[Rule 702(e)(1) of the RCAP]
- b. Include in the annual report required by Rule 707(b) of the RCAP, a recalculation of the NMOC emission rate annually using the procedures specified in Rule 704(a) of the RCAP until such time as the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, or the Sanitary Landfill System is closed:
  - i. If the NMOC emission rate is equal to or greater than 50 megagrams per year, the owner or operator shall within 30 months after the date when the SLS acquired an emission rate of 50 megagrams per year, install a collection and control system in compliance with Rule 702(f) of the RCAP that effectively captures the gas generated within the SLS. The submittal date of the annual report required in Rule 707(b)(1) of the RCAP will determine the date when the condition in Rule 702 (a) (3) is met.
  - ii. If the SLS is permanently closed, a Closure notification shall be submitted to the DNER as provided under Rule 707(d) of the RCAP. [Rule 702(e) (2) of the RCAP]

#### TEST METHODS AND PROCEDURES

3. According to Rule 603(a)(3)(iv) of the RCAP, EQB may, at its discretion, require **MGL** to conduct additional monitoring to ensure compliance with permit terms and conditions of the permit. If the DNER requires **MGL** to perform a performance test, the EQB will specify the methods and procedures to be followed.
4. PSD LEVELS COMPARISON (PREVENTION OF SIGNIFICANT DETERIORATION): **MGL** shall estimate the NMOC emission rate for comparison to the PSD major source and significance levels as established in 40 CFR Section 51.66 or 52.21 and in the Appendices of this Regulation, using EPA's Compilation of Air Pollutant Emission Factors (AP-42) or other EPA approved measurements procedures. [Rule 704(g) of the RCAP]

#### DESIGN CAPACITY REPORT

5. **MGL** shall submit an amended design capacity report to the DNER to notify any increase in the design capacity of the SLS, whether the increase<sup>10</sup> results from an increase in the permitted area or depth of the SLS, approved in this permit, a change in the operating procedures, or any other

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<sup>10</sup> An increase in Design Capacity requires a modification of the construction permit under Rule 203 of the RCAP.

means which results in an increase in the maximum design capacity of the SLS above 2.5 million megagrams or 2.5 million cubic meters. The amended design capacity report shall be submitted within 90 days of the issuance of an amended construction or operation permit, or the placement of waste in additional land, or change in operational procedures which will result in an increase in maximum design capacity, whichever comes first. [Rule 707(a)(3) of the RCAP]

- a. The amended design capacity shall be calculated using good engineering practices. Calculations must be provided, along with parameters such as solid waste depth, solid waste acceptance rate and compaction practices, as part of the report. The DNER may require other reasonable information as necessary to verify the maximum Design Capacity of the SLS.

#### NMOC EMISSION RATE REPORT

6. **MGL** shall submit an NMOC emission rate report to the Board initially and **annually thereafter**, except as provided for in Rule 707(b)(1)(ii) or (b)(3) of the RCAP. The DNER may request such additional information, as may be necessary to verify the reported NMOC emission rate. [Rule 707(b) of the RCAP]
  - a. The NMOC emission rate shall contain an annual or 5-year estimate of the NMOC emission rate calculated using the formula and procedures provided in Rule 704(a) through (f) of the RCAP, as applicable. [Rule 707(b)(1) of the RCAP]
    - i. If the estimated NMOC emission rate as reported in the annual report to the DNER is less than 50 megagrams per year in each of the next 5 consecutive years, **MGL** may elect to submit an estimate of the NMOC emission rate for the next 5 years period in lieu of the annual report. This estimate shall 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 shall be provided to the Board. This estimate shall 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 shall be submitted to the Board. The revised estimate shall cover the 5-year period beginning with the year in which the actual waste acceptance rate exceeded the estimated waste acceptance rate. [Rule 707(b)(1)(ii) of the RCAP]
  - b. The NMOC emission rate report shall include all data, calculations, sample reports and measurements used to estimate the annual or 5 years emissions. [Rule 707(b)(2) of the RCAP]

**CLOSURE REPORT**

7. **MGL** shall submit a closure report to the Board within 30 days of waste acceptance cessation. The Board may require additional information, as may be necessary, to verify that permanent closure has taken place in accordance with the requirements in 40 CFR Section 258.60. If a closure report has been submitted to the Board, no additional waste may be placed into the SLS without filing a notification of modification as described under the 40 CFR Section 60.7 (a)(4). [Rule 707 (d) of the RCAP]

**RECORDKEEPING**

**DESIGN CAPACITY RECORDS**

8. **MGL** shall keep for at least 5 years up-to-date, readily accessible, on-site records of the maximum design capacity, the current amount of solid waste-in place, and the year-to-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copies or electronic formats are acceptable. [Rule 708(a) of the RCAP]

**OTHER FILES/ RECORDS**

**NON-COMPLIANCE PENALTY**

9. Failure to comply with any of the requirements established under Part VII of the RCAP constitutes a violation and the owner of a Municipal SLS will be subject to an administrative order to comply and/ or liable to administrative penalties. The penalties will be imposed in accordance with the Commonwealth of Puerto Rico, Environmental Public Policy Act, Act No.416 of September 22,2004, as amended, and any regulations created under it. [Rule 710 of the RCAP]

**D. Internal combustion engines: EU-3, EU-4, EU-5, EU-6 and EU-7**

Condition	Parameter	Value	Units	Test Method	Method Frequency	Recordkeeping Requirements	Reports Frequency
Visible Emissions Limit	Opacity	20	Percent (6-minute average)	Method 9	Once during the first year of the permit.	Visible emissions reading	60 days after the reading
Sulfur content in diesel	Sulfur content	0.0015	Weight percent	Fuel supplier certification	Each time fuel is received in the facility	Record with the fuel sulfur content.	Monthly

Condition	Parameter	Value		Units	Test Method	Method Frequency	Recordkeeping Requirements	Reports Frequency
Limit on Hours of operation	Hours of operation	EU-3	100	hours per year, each one	Non-resettable hours meter	Continuous	Record	Monthly
		EU-4	100					
		EU-5	4,000					
		EU-6	500					
		EU-7	500					Semiannual

a. VISIBLE EMISSIONS LIMIT:

- (i) The permittee shall not exceed the opacity limit of 20% on a six (6) minutes average for units EU-3, EU-4, EU-5, EU-6 and EU-7. Nevertheless, the permittee may discharge into the atmosphere visible emissions of an opacity up to 60% for a period of no more than four (4) minutes in any consecutive thirty (30) minutes interval. [Rule 403(A) of the RCAP]
- (ii) The permittee shall contract an independent opacity reader, certified in a school endorsed by the EPA or DNER, to perform one (1) opacity reading in the stack of the units EU-3, EU-4, EU-5, EU-6 and EU-7 during the first year of the permit approval using Method 9 established under Appendix A in the 40 CFR part 60. The engines shall be operating when performing the opacity readings.
- (iii) The permittee shall submit a testing protocol at least 30 days prior to the test for approval by the DNER. This protocol must contain the information described in Rule 106(C) of the RCAP. The permittee shall include a copy of the format that will be used to record the visible emissions readings.
- (iv) The permittee shall notify in writing to the DNER at least fifteen (15) days prior to the test to allow the DNER the opportunity to have an observer present. [Rule 106(D) of the RCAP]
- (v) The permittee shall submit two (2) copies of the tests report within 60 days after the test. This report shall contain the information required under Rule 106(E) of the RCAP.
- (vi) As specified in Rule 603(a)(4)(ii) of the RCAP, the permittee shall retain all records for the required monitoring and supporting information for a period of five (5) years from the date of the monitoring sample, measurement, report or application.

b. SULFUR CONTENT LIMIT:

- (i) The fuel sulfur limit in the diesel used in each engine shall not exceed 0.0015% weight according to the construction permit PFE-32-0703-1106-II-C.

- (ii) The permittee shall keep a copy of the fuel supplier certification indicating the sulfur content to demonstrate compliance with the requirement of keeping a monthly record of the sulfur content in the diesel.
  - (iii) The permittee shall keep a monthly record with the date, the readings of the hour meters and the total hours of operation for each engine. The permittee shall include in the records the purpose of operation (purpose of operation: emergency, maintenance, etc.). The hours recorded in the hour meter shall be used to calculate the cumulative fuel use in a monthly basis. The fuel consumption calculation during any 12 consecutive months shall be calculated by adding the fuel used on each month. It shall be available for inspection for review by DNER technical personnel. [PFE-32-0703-1106-II-C]
  - (iv) The permittee shall submit to the DNER a report every **six months**, indicating on a monthly basis the sulfur content (weight percent) in the fuel burned and the amount of fuel burned in each engine. This report shall be sent to the following email address: [reporteconsumo@drna.pr.gov](mailto:reporteconsumo@drna.pr.gov). In the event of any change in the method of reporting, it shall be posted at the following address: [www.drna.pr.gov/acai](http://www.drna.pr.gov/acai) no later than the next 15 days after ending the six months period for which the report is representative. The report that covers the period from January through June shall be submitted no later than **July 15** of the same year and the report that covers the period from July through December shall be submitted no later than **January 15** of the next year. Fuel consumption reports must include a signed certification by the owner or operator of the facility that the sulfur content certifications are representative of all fuel burned during the reporting period. You shall keep a copy of this report at the facility available for inspection to DNER technical personnel.
    - a) MGL shall keep a copy of the diesel supplier certification each time the fuel is received in the facility. Such certification shall indicate the fuel sulfur content, to demonstrate compliance with the previous condition.
  - (v) As specified in Rule 603(a)(4)(ii) of the RCAP, the permittee shall retain all records of required monitoring data and supporting information for a period of five (5) years from the date of the monitoring sample, measurement, report application. These includes a record of the monthly fuel consumption and sulfur content in the fuel burned.
  - (vi) The permittee shall submit, with each semi-annual report and annual compliance certification, a summary of the reports for that year indicating the sulfur content by weight for the fuel consumed monthly.
- c. OPERATING HOURS LIMIT:
- (i) The maximum operating hours for each internal combustion engine shall not exceed the following limit:



Engines	Hours per year
EU-3	100
EU-4	100
EU-5 <sup>11</sup>	4,000
EU-6	500
EU-7	500

- a) **Emergency stationary RICE (NESHAPS Subpart ZZZZ).** The maximum hours of operation of the EU-3 engine shall not exceed 100 hours per year. To maintain emergency use status as specified in 40 CFR Part 63 Subpart ZZZZ, the engine is authorized to operate for a maximum of 100 hours per calendar year for any combination of the purposes specified in 40 CFR §63.6640(f)(2)(i) and up to 50 hours of non-emergency operation as specified in 40 CFR 63.6640(f)(4). The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in 40 CFR 63.6640(f)(2), while the 100 hours of operation will be counted as part of the hours limit (100 hours/year) set forth in this condition. For any engine operation that does not meet such requirements, the engine will not be considered an emergency engine under subpart ZZZZ and will have to comply with all non-emergency engine requirements.
- b) **Emergency stationary ICE (NSPS Subpart IIII).** The maximum hours of operation of the EU-4 engine shall not exceed 100 hours per year. To maintain emergency engine status as specified in 40 CFR Part 60 Subpart IIII, the engine is authorized to operate for a maximum of 100 hours per calendar year for any combination of the purposes specified in 40 CFR §60.4211(f)(2)(i) and up to 50 hours of non-emergency operation as specified in 40 CFR 60.4211(f)(3). The 50 hours of operation in non-emergency situations will be counted as part of the 100 hours per calendar year for maintenance and testing provided in 40 CFR 60.4211(f)(2), while these 100 hours of operation will be counted as part of the hours limit set forth in this condition. For any engine operation that does not meet such requirements, the engine will not be considered an emergency engine under subpart IIII and will have to comply with all non-emergency engine requirements.
- c) **Emergency stationary ICE (NSPS Subpart IIII).** The maximum hours of operation of the EU-6 engine shall not exceed 500 hours per year. To maintain emergency engine status as specified in 40 CFR Part 60 Subpart IIII, the engine is authorized to operate for a maximum of 100 hours per calendar year for any combination of the purposes specified in 40 CFR §60.4211(f)(2)(i) and up to 50 hours of non-emergency operation as specified in 40 CFR 60.4211(f)(3). The 50 hours of operation in non-emergency situations will be counted as part of the 100 hours

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<sup>11</sup> Non-emergency stationary CI internal combustion engine.

per calendar year for maintenance and testing provided in 40 CFR 60.4211(f)(2), while these 100 hours of operation will be counted as part of the hours limit set forth in this condition. For any engine operation that does not meet such requirements, the engine will not be considered an emergency engine under subpart IIII and will have to comply with all non-emergency engine requirements.

d) **Emergency stationary RICE (NESHAPS Subpart ZZZZ).** The maximum hours of operation of the EU-7 engine shall not exceed 500 hours per year. To maintain emergency use status as specified in 40 CFR Part 63 Subpart ZZZZ, the engine is authorized to operate for a maximum of 100 hours per calendar year for any combination of the purposes specified in 40 CFR §63.6640(f)(2)(i) and up to 50 hours of non-emergency operation as specified in 40 CFR 63.6640(f)(4). The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in 40 CFR 63.6640(f)(2), while the 100 hours of operation will be counted as part of the hours limit (100 hours/year) set forth in this condition. For any engine operation that does not meet such requirements, the engine will not be considered an emergency engine under subpart ZZZZ and will have to comply with all non-emergency engine requirements.

(ii) Each engine shall be provided with a non-resettable hour meter so that the hours of operation can be checked, and fuel consumption can be calculated.

(iii) As specified in Rule 603(a)(4)(ii) of the RCAP, the permittee shall retain all records of required monitoring data and supporting information for a period of five (5) years from the date of the monitoring sample, measurement, report or application. These include the records of the monthly and annual fuel consumption report.

(iv) The permittee shall submit, with each annual compliance certification, an annual report summary of reports indicating the operating hours of each engine on a monthly and annual basis.

d. NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES (40 CFR Part 63, Subpart ZZZZ) for EU-3 and EU-7

(i) According to the applicability requirements in section 63.6590 of Subpart ZZZZ, the engines in the EU-3 and EU-7 units are subject to the 40 CFR Part 63, Subpart ZZZZ: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE NESHAP), hence they must comply with all applicable requirements of this regulation on or before May 3, 2013. The requirements include, but are not limited to, the following:

- a. According to Table 2d to Subpart ZZZZ, the permittee shall:
  - i. Change oil and filter every 1,000 hours of operation or annually, whichever occurs first;
    - 1. You will have the option to use an oil analysis program as described in section 63.6625 (i) of 40 CFR in order to extend the specified oil change requirement specified in Table 2d to Subpart ZZZZ.
  - ii. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary, and
  - iii. Inspect all the hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
- b. According to the 40 CFR section 63.6604(a), the permittee must use fuel diesel for these engines that meets the requirements of the 40 CFR section 1090.305. This is,
  - i. The sulfur content in the fuel shall not exceed 15 ppm or 0.0015% by weight.
  - ii. The fuel must comply with a minimum cetane index of 40 or the aromatic content shall not exceed 35% per volume.
- c. According to the 40 CFR section 63.6605, you must operate the engine in a manner for minimizing emissions.
- d. According to the 40 CFR section 63.6640 you must operate and continuously comply with the Work or Management Practices contained in Table 6 of the Subpart.
- e. You must comply with the monitoring, installation, collection, operation, and maintenance requirements of the 40 CFR sections 63.6625(e), (h), and (i), as applicable.
- f. According to the 40 CFR section 63.6625, you must:
  - i. operate and maintain the engine and the control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

- ii. You must install a non-resettable hour meter if one is not already installed.
    - iii. Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.
  - g. The permittee must demonstrate continuous compliance according to the applicable requirements established in 40 CFR sections 63.6605 and 63.6640.
  - h. The permittee must comply with the applicable notification according to requirements of section 63.6645 (a), (f), (h) of the 40 CFR.
  - i. The permittee must keep applicable records according to the 40 CFR section 63.6655, except with §63.6655(c) and (f).
  - j. The permittee must comply with the applicable General Provisions of sections 63.1 through section 63.15 which are included in Table 8 of the Subpart ZZZZ of the 40 CFR.
- e. STANDARDS OF PERFORMANCE FOR NEW SOURCES OF STATIONARY COMPRESSION IGNITION INTERNAL COMBUSTION ENGINES (40 CFR PART 60, SUBPART IIII) FOR FIRE PUMP ENGINE EU-4
- (i) The engine in EU-4 is subject to 40 CFR, Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants Reciprocating Internal Combustion Engines). In accordance with 40 CFR section 63.6590(c), the engine shall comply with the requirements of 40 CFR Part 60, Subpart IIII (New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines) and no further requirements apply for such engine under Subpart ZZZZ. The permittee shall comply with all applicable requirements under 40 CFR Part 60, Subpart IIII.
    - a. In accordance with 40 CFR section 60.4205(c), the engine shall comply with the applicable emission standards of section 60.4202, for all pollutants, pertaining to the same model year and maximum engine horsepower. In accordance with Appendix I part 1039 of 40 CFR and the smoke standards as specified in 40 CFR 1039.105, the engine may not exceed the following emissions:
      - i. 7.8 g/hp-hr for NMHC + NO<sub>x</sub>,
      - ii. 3.7 g/hp-hr for CO,
      - iii. 0.60 g/hp-hr for PM, and

- b. The permittee shall operate and maintain the engine in a manner that meets the required emission standards throughout the life of the engine. [40 CFR section 60.4206]
- c. In accordance with 40 CFR section 60.4207(b), the permittee shall use diesel fuel for this engine that meets the requirements of 40 CFR section 1090.305. That is,
  - i. The maximum sulfur content in the fuel shall not exceed 15 ppm or 0.0015% by weight.
  - ii. The fuel shall meet a minimum cetane number of 40 or the aromatic content may not exceed 35% by volume.
- d. The permittee shall comply with the installation, operation, and maintenance requirements of 40 CFR section 60.4208(a), (b), (h), (i).
- e. The permittee shall comply with the applicable monitoring requirements of 40 CFR section 60.4209(a) or (b), as applicable.
- f. The permittee shall demonstrate compliance by purchasing the engine certified to the standards in 40 CFR section 60.4205(b) and subsection (a) of this condition. The engine shall be installed and configured in accordance with the manufacturer's written specifications related to emissions, except as permitted in paragraph (g) of section 60.4211. [40 CFR section 60.4211(c)].
- g. The permittee shall comply with the compliance requirements of 40 CFR sections 60.4206 and 60.4211(a), (c), (f), (g), as applicable.
- h. The permittee shall comply with the test methods and other procedures in 40 CFR section 60.4212, as applicable.
- i. The permittee shall comply with the applicable notification, reporting, and recordkeeping requirements of 40 CFR section 60.4214 (b) or (c), as applicable.
- j. The permittee shall comply with the General Provisions of sections 60.1 through section 60.19 applicable to it, which are included in Table 8 of Subpart IIII of 40 CFR.

f. STANDARDS OF PERFORMANCE FOR NEW SOURCES OF STATIONARY COMPRESSION IGNITION INTERNAL COMBUSTION ENGINES (40 CFR PART 60, SUBPART IIII) FOR INTERNAL COMBUSTION ENGINE EU-5: NON-EMERGENCY

- (i) The engine in EU-5 is subject to 40 CFR, Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants from Reciprocating Internal Combustion Engines). In accordance with 40 CFR section 63.6590(c), the engine shall comply with the requirements of Subpart ZZZZ by meeting the applicable requirements of 40 CFR, Part 60 Subpart IIII (New Source Performance Standards for Stationary Compression Ignition Internal Combustion Compression Ignition Engines) and no further requirements apply to such engine under Subpart ZZZZ. The permittee shall comply with all applicable requirements of the 40 CFR Part 60 Subpart IIII.
  - a. In accordance with 40 CFR section 60.4204(b), the engine shall comply with the applicable emission standards of section 60.4201(a), for all pollutants, pertaining to the same model year and maximum engine horsepower. In accordance with Appendix I part 1039 of 40 CFR and the smoke standards as specified in 40 CFR 1039.105, the engine may not exceed the following emissions:
    - i. 4.0 g/KW-hr for NMHC + NO<sub>x</sub>,
    - ii. 5.0 g/KW-hr for CO,
    - iii. 0.30 g/KW-hr for PM, and
    - iv. Smoke standards as specified in section 1039.105 of 40 CFR.
  - b. The permittee shall operate and maintain the engine in a manner that meets the required emission standards throughout the life of the engine. [40 CFR section 60.4206]
  - c. In accordance with 40 CFR section 60.4207(b), the permittee shall use diesel fuel for this engine that meets the requirements of 40 CFR section 1090.305. That is,
    - i. The maximum sulfur content in the fuel shall not exceed 15 ppm or 0.0015% by weight.
    - ii. The fuel shall comply with a minimum cetane number of 40 or the aromatic content shall not exceed 35% by volume.
  - d. The permittee shall comply with the installation, operation, and maintenance requirements of 40 CFR section 60.4208(a)-(i).

- e. The permittee shall comply with the applicable monitoring requirements of 40 CFR section 60.4209(b), as applicable.
  - f. The permittee shall demonstrate compliance by purchasing an engine certified to the standards in 40 CFR section 60.4204(b) and subsection a of this condition. The engine shall be installed and configured in accordance with the manufacturer's written specifications related to emissions, except as permitted in paragraph (g) of section 60.4211. [40 CFR section 60.4211(c)].
  - g. The permittee shall comply with the compliance requirements of 40 CFR sections 60.4206 and 60.4211(a), (c), (f), (g), as applicable.
  - h. The permittee shall comply with the test methods and other procedures in 40 CFR sections 60.4212 and 60.4204(d), as applicable.
  - i. The permittee shall comply with the applicable notification, reporting, and recordkeeping requirements of 40 CFR section 60.4214(b) or (c), as applicable.
  - j. The permittee shall comply with the General Provisions of Sections 60.1 through section 60.19 applicable to it, which are included in Table 8 of Subpart IIII of 40 CFR.
- g. STANDARDS OF PERFORMANCE FOR NEW SOURCES OF STATIONARY COMPRESSION IGNITION INTERNAL COMBUSTION ENGINES (40 CFR PART 60, SUBPART IIII) FOR INTERNAL COMBUSTION ENGINE EU-6: EMERGENCY
- (i) The engine is subject to the 40 CFR, Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants Reciprocating Internal Combustion Engines). In accordance with 40 CFR section 63.6590(c), the engine shall comply with the requirements of Subpart ZZZZ by meeting the requirements of 40 CFR Part 60, Subpart IIII (New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines) and no further requirement apply shall not apply additional requirements for such engine under Subpart ZZZZ. The permittee shall comply with all applicable requirements under 40 CFR Part 60, Subpart IIII.
    - a. In accordance with 40 CFR section 60.4205(b), the engine shall comply with the applicable emission standards of section 60.4202, for all pollutants, pertaining to the same model year and maximum engine horsepower. In accordance with Appendix I part 1039 of 40 CFR and the smoke standards as specified in 40 CFR 1039.105, each engine may not exceed the following emissions:
      - i. 7.5 g/KW-hr for NMHC + NO<sub>x</sub>,

- ii. 5.5 g/KW-hr for CO,
  - iii. 0.60 g/KW-hr for PM, and
  - iv. Smoke standards as specified in 40 CFR section 1039.105.
- b. The permittee shall operate and maintain the engine in a manner that meets the required emission standards throughout the life of the engine. [40 CFR section 60.4206]
- c. In accordance with 40 CFR section 60.4207(b), the permit holder shall use diesel fuel for this engine that meets the requirements of 40 CFR section 1090.305. That is,
  - i. The maximum sulfur content in the fuel shall not exceed 15 ppm or 0.0015% by weight.
  - ii. The fuel shall meet a minimum cetane number of 40 or the aromatic content may not exceed 35% by volume.
- d. The permittee shall comply with the installation, operation, and maintenance requirements of 40 CFR section 60.4208(a), (b), (h), (i).
- e. The permittee shall comply with the applicable monitoring requirements of 40 CFR section 60.4209(a) or (b), as applicable.
- f. The permittee shall demonstrate compliance by purchasing the engine certified to the standards in 40 CFR section 60.4205(b) and subsection (a) of this condition. The engine shall be installed and configured in accordance with the manufacturer's written specifications related to emissions, except as permitted in paragraph (g) of section 60.4211. [40 CFR section 60.4211(c)].
- g. The permittee shall comply with the compliance requirements of 40 CFR sections 60.4206 and 60.4211(a), (c), (f), (g), as applicable.
- h. The permittee shall comply with the test methods and other procedures in 40 CFR section 60.4212, as applicable.
- i. The permittee shall comply with the applicable notification, reporting, and recordkeeping requirements of 40 CFR section 60.4214 (b) or (c), as applicable.



- j. The permittee shall comply with the General Provisions of sections 60.1 through section 60.19 applicable to it, which are included in Table 8 of Subpart IIII of 40 CFR.

**Section VI - Insignificant Emission Units**

The following activities shall be considered insignificant as long as the unit meet the descriptions indicated below and they are not subject to an applicable requirement.

<b>Emission Unit Identification</b>	<b>Units</b>	<b>Description (Basis for exemption)</b>
Engines of any waste transportation vehicle	8	Appendix B.3. iii. of the RCAP
Air conditioners	7	Rule 206(B)(1) of the RCAP
Water Truck	1	Appendix B-3-iii of the RCAP
Water Tanks	2	Appendix B-3-iii of the RCAP
Equipment (1) for solid waste management in Recycling Plant and Transfer Station	4	Appendix B-3-iii of the RCAP
Refrigeration systems	1	Appendix B.3.xxxxv of the RCAP
Air compressors	2	Appendix B.3.xxiii of the RCAP
Landfill maintenance equipment (trimmers)	2	Rule 206(B)(3) of the RCAP- Internal combustion engines having a capacity of less than 10 horsepower (hp)
Storage tank with capacity of less than 10,000 gallons	8	Appendix B.3. ii. (N) of the RCAP
Activities in maintenance workshops such as soldering equipment used as auxiliary to principal source equipment.	2	Appendix B.3. ii. (E) of the RCAP

**Section VII - Permit Shield**

- A. According to Rule 603(D) of the RCAP, compliance with the conditions of the permit shall be deemed as compliance with any other applicable requirement at the date of permit but only if such applicable requirement is specifically identified in the permit. Moreover, the permittee shall be deemed in compliance with any other requirement specifically identified in the permit as Non-Applicable.

**(1) Non- Applicable Requirements**

Non-Applicable Requirements	Regulation	Description
Standards of Performance for Municipal Solid Waste Sanitary Landfills Systems	40 CFR Part 60 Subpart WWW	The disposal of solid waste began in 1973 and it has not been reconstructed or modified after May 30, 1991.
Standards of Performance for Municipal Solid Waste Landfills That Commenced Construction, Reconstruction, or Modification After July 17, 2014	40 CFR Part 60 Subpart XXX	The facility was not Constructed, Reconstructed, Reconstruction, or Modified after July 17, 2014.
National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Sanitary Landfills Systems	40 CFR Part 63 Subpart AAAA	Does not apply to SLS with a Design Capacity greater than 2.5 million megagrams and 2.5 million cubic meters and an NMOC emission rate below 50 megagrams per year.
Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	40 CFR Part 60 Subpart IIII	Does not apply to internal combustion engines EU-3 and EU-7 because these engines were ordered before July 11, 2005 and were manufactured on or before April 11, 2006.
Standards of Performance for New Sources of Stationary Spark Ignition Internal Combustion Engines	40 CFR Part 60 Subpart JJJJ	Does not apply to EU-3, EU-4, EU-5, EU-6 and EU-7 because these engines are not spark ignited internal combustion engines. These are compression ignited engines.
Particulate Matter Emission Limit for Fuel-Burning equipment	RCAP Rule 406	Does not apply to EU-3, EU-4, EU-5, EU-6 and EU-7 because these engines do not meet the definition of Fuel- Burning equipment under Rule 102 of RCAP.
National Emission Standard for Asbestos	40 CFR Part 61 Subpart M	This facility is not subject to this subpart because it does not receive asbestos-containing materials.

**Section VIII - Permit Approval**

By virtue of the authority conferred upon the Department of Natural and Environmental Resources by the Environmental Public Policy Act, Law Number 416 of September 22 of 2004, as amended, and after verifying the administrative file and compliance with the Uniform Administrative Procedures Act, Law Number 170 of August 12, 1988, as amended, the Federal Clean Air Act, the Puerto Rico Environmental Public Policy Act and the Regulations for the Control of Atmospheric Pollution of Puerto Rico, the Department of Natural and Environmental Resources approves the permit subject to the terms and conditions therein established.

In San Juan, Puerto Rico, [DATE]

**DEPARTMENT OF NATURAL AND ENVIRONMENTAL RESOURCES**

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Roberto Méndez Martínez  
Acting-Secretary

## **APPENDIX**

## **Appendix I     Definitions and Abbreviations**

### **A.     Definitions**

1. Permittee- Person and/or entity to which the Puerto Rico Department of Natural and Environmental Resources has issued an Operating Permit for an Emission Source under Title V.
2. Act – Clean Air Act, as amended, 42 U.S.C. 7401, et seq.
3. Responsible Official – As defined in the Regulation for the Control of Atmospheric Pollution of Department of Natural And Environmental Resources.
4. Regulation – Regulation for the Control of Atmospheric Pollution of the Environmental Quality Board.
5. Title V – Title V of the Clean Air Act (42 U.S.C 7661)

### **B.     Abbreviations**

AP-42	Compilation of Air Pollutant Emission Factors
Btu	British Thermal Units
C <sub>NMOC</sub>	Non-Methane Organic Compounds Concentration
CI	Compression Ignition
CH <sub>4</sub>	Methane
CO	Carbon Monoxide
CO <sub>2</sub>	Carbon Dioxide
CO <sub>2</sub> e	Carbon Dioxide Equivalent
NMOC	Non-Methane Organic Compounds
CFR	Code of Federal Regulations

DNER	Department of Natural and Environmental Resources
EPA	Environmental Protection Agency
GHG	Greenhouse Gases
HAP	Hazardous Air Pollutants
EQB	Environmental Quality Board of Puerto Rico
k	Methane generation rate constant
Mg	Megagrams
MGL	Municipal of Guaynabo Landfill
MMBtu	Million Btu
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NAAQS	National Ambient Air Quality Standards
NSPS	New Source Performance Standards
NO <sub>x</sub>	Nitrogen Oxides
NMHC	Nonmethane hydrocarbons
Pb	Lead
PM	Particulate matter
PM <sub>10</sub>	Particulate matter with a particle which diameter has an aerodynamic mass size equal to or less than ten (10) microns.
PSD	Prevention of Significant Deterioration
RCAP	Environmental Quality Board - Regulation for the Control of Atmospheric Pollution
RMP	Risk Management Program

RICE	Reciprocating Internal Combustion Engine
SIC	Standard Industrial Classification
scfm	Standard cubic feet per minute
SLS	Sanitary Landfill System
SO <sub>x</sub>	Sulfur oxide
SO <sub>2</sub>	Sulfur dioxide
MGL	Municipality of Guaynabo Landfill
VOC	Volatile Organic Compound