

TODO Y NILALA Y TANO MAN UNO

SOLID WASTE MANAGEMENT PERMIT

Guam Solid Waste Authority This permit is hereby issued to

Lot No. B-3, REM-2, Dandan, Inalåhan, Guam Municipal Solid Waste Landfill and authorizes the operation of a

In accordance with the Title 22. Guam Administrative Rules and Regulations (GARR) Division II', Chapter 21, Solid Waste Collection Regulations (SWCR, Title 22, GARR, Division IV, Chapter 23, Guam's Solid Waste Disposal Rules and Regulations (GSWDRR) and Title 10, Guam Code Annotated, Chapter 31, Solid Waste Management and Litter Control, (SWMLC)

This permit authorizes the disposal of Municipal Solid Waste and Special Waste generated in Guam. It is non-transferable and contingent upon the holder. Howing the government code of Guam and all rules, regulations, and orders of the Guam Environmental Protection Agency. No one shall intentionally deface, alter, forge, counterfeit, or faisify it is permit. Any such act will result in the permit must be displayed at the place of operation. immediate revocation of the permit. The renewal application must be submitted to the Guam Environmental Protection Agency at least sixty (60) calend, r days before the expiration date. This

MICHELLE C.R. LASTIMOZA ADMINISTRATOR

Middle Contract

ISSUE DATE

10/20/2025

Septemb: r 30, 2030

EXPIRATION DATE

72			

GUAM ENVIRONMENTAL PROTECTION AGENCY MUNICIPAL SOLID WASTE LANDFILL FACILITY PERMIT NO. 25-030 MSWLF DATED SEPTEMBER 2025

FACILITY AND PHYSICAL LOCATION:

LAYON MUNICIPAL SOLID WASTE LANDFILL GOVERNMENT OF GUAM LOT NO. B-3 REM-2 **DANDAN ROAD** MALOJLOJ, GUAM

LATITUDE: 13°18'34"N LONGITUDE: 144°44'14"W

NAME AND MAILING ADDRESS OF APPLICANT:

GOVERNMENT OF GUAM GUAM SOLID WASTE AUTHORITY 542 NORTH MARINE CORPS DRIVE TAMUNING, GUAM 96913

CONTACT NOS.:

Facility Phone No.: 671-646-3215 Operator Phone No.: 671-282-5263 Owner Phone No.: 671-646-3215

MICHELLE C.R. LASTIMOZA ADMINISTRATOR

NAME AND MAILING ADDRESS OF LANDOWNER:

GUAM SOLID WASTE AUTHORITY 542 NORTH MARINE CORPS DRIVE TAMUNING, GUAM 96913

NAME AND MAILING ADDRESS OF OPERATOR:

GGH GUAM LLC. (ON BEHALF OF **GOVERNMENT OF GUAM GUAM SOLID WASTE AUTHORITY 542 NORTH MARINE CORPS DRIVE TAMUNING, GUAM 96913**

SEPTEMBER 30, 2030 EXPIRATION DATE

Guam Solid Waste Authority General Manager

Version 20-Oct-25

GUAM ENVIRONMENTAL PROTECTION AGENCY MUNICIPAL SOLID WASTE LANDFILL FACILITY PERMIT NO. 25-030 MSWLF

SPECIFICATIONS:

PERMITTED ACTIVITIES: Construction, operation, closure, and

post-closure care of Layon Municipal Sanitary Landfill Phase II (Cell 3 OF 11)

KEY DESIGN PARAMETERS:

Permitted Area (in acres):

(Table 1 – Appendix F, Book 2) 13.3 acres (Cell 3)

Total Landfill Footprint Area 127.4 acres (Cell 1 – Ceil 11)

Design Capacity (Net Refuse Airspace):

(Table 2 – Appendix F, Book 2) 1,941,007 yards³ (Cell 3)

Total Landfill Footprint Capacity 15,808,794 yard³ (Cell 1 – Cell 11)

Cells Final Grade:

Maximum Elevation (Ft. MSL): 470 Feet above MSL

Cells Base Grade:

Maximum Depth: (Ft. MSL): 305 Feet MSL

Floor Liner System:

(Section 4.4, Book 2, Drawing L2.8)

(from top to bottom:)

12-mil scrim-reinforced polyethylene rain cover

3 ft. protective soil layer

Geocomposite primary LCRS drainage layer

80-mil HPDE geomembrane

Geocomposite secondary LCRS drainage layer

60-mil HDPE geomembrane

24 inches of low permeability soil (max. 1.0 × 10-6 cm/sec)

12 inches of compacted native soil

Geocomposite subdrain layer

Prepared subgrade above sub-drain system

Sub-drain System: 310 Feet MSL

EXECUTIVE SUMMARY

The Layon Municipal Solid Waste Landfill (Landfill/Layon) is an active site that accepts municipal solid waste, situated on Lot B-3REM-2 in the Dandan area of Malojloj, Inarajan, Guam. It was permitted in November 2009 under Permit No. 09-015 for a five-year duration. The permitted section, Phase II, includes Cell 3, which spans about 13.3 acres and has a capacity of 1.0 million cubic yards. The everall design and layout accommodate approximately 127.4 acres of lined landfill area, divided into 11 cells, with a total capacity of around 15.8 million cubic yards of airspace for refuse. The permit covered (1) the construction of Cell 3 and (2) waste disposal activities within that cell along with all related operations necessary for landfill functioning.

On April 30, 2019, the Courts authorized the transfer of the daily administrative and managerial duties of the Guam Solid Waste Authority (GSWA) to the Government of Guam. Cell 3 and its related infrastructure, including access roads and leachate management systems, were completed by July 2, 2021. The facility began accepting waste on July 15, 2023. From FY 2021 to FY 2024, the Layon Landfill received a total of 372,138 tons of municipal solid waste. The current average annual waste intake is approximately 124,046 tons, with a 3 percent annual increase.

In October 2023, the Layon Landfill Permit was revised to incorporate Book 7, which includes the Special Waste Acceptance Amendment and the Hazardous Waste Exclusion Program. This update authorizes the disposal of asbestos-containing materials, Non-Hazardous Contaminated Soil, Non-Hazardous Treated Lumber, Non-Hazardous Sandblast Media, and Stabilized Fats, Oils, and Grease. Furthermore, Book 7 permits the beneficial use of shredded or chipped tire-derived aggregate.

Layon Municipal Solid Waste Landfill is situated on a 317-acre parcel in the Dandan area, southwest of the former NASA tracking station. The Dandan area, where the Layon footprint is located, is bordered by undeveloped private and government land. The parcel is zoned M-1 industrial and includes a mix of agricultural and recreational uses. The Layon footprint encompasses five vegetation communities: savannah, grassland, ravine forest, disturbed vegetation/badlands, and wetlands. No threatened or endangered species were observed during the siting and construction surveys; however, the site's wetlands may serve as habitat for the endangered Mariana Common Moorhen. No formal archaeological sites were identified during the surveys.

The facility, design, and landfill operating features comply with the Resource Conservation and Recovery Act (RCRA) Subtitle D regulations and the Guam Solid Waste Disposal Rules and Regulations, 10 GCA, Chapter 23, Title 22, Division 4. The Landfill is also required to comply with all other applicable local and federal laws and regulations.

GUAM ENVIRONMENTAL PROTECTION AGENCY MUNICIPAL SOLID WASTE LANDFILL FACILITY PERMIT NO. 25-030 MSWLF

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PART I - PERMIT DOCUMENTS

I.A. APPROVED DESIGNS, PLANS, AND REPORTS

The Permittee shall operate the facility and construct or install associated appurtenances thereto in accordance with the provisions of *Guam's Solid Waste Management and Litter Control Act, 10 Guam Gode Annotated, Chapter 51, Guam Solid Waste Disposal Rules and Regulations, 22 Guam Administrative Rules, Chapter 23,* the conditions of this permit, and the following permit application documents which are incorporated herein by reference:

(List of all final and Guam EPA-approved documentation and applications applicable to this permit)

- FSSR/EIS Final Site Selection Report, Environmental Impact Statement for the Setting of a Municipal Solid Waste Landfill Facility, Guam, dated March 14, 2005.
- SEIS Final Supplemental Environmental Impact Statement for the Setting of a Municipal Solid Waste Landfill Facility, Guam, dated July 15, 2008.

FINAL HYDROGEOLOGIC REPORT

Final Integrated Hydrogeologic Assessment, Volume I, dated November 26, 2008.

CERTIFICATION OF ZONING COMPLIANCE

Dated January 16, 2009, Guam Land Use Commission.

Final and Approved Application Documents:

- Books 1 Technical Specifications, dated December 12, 2008, amended May 22, 2009, amended July 10 and 23, 2009, amended August 5, 2009, to incorporate Book 1A and 1B into Book 1.
- Books 2 Design Narratives and Attachments, dated December 12, 2008, amended May 22, 2009, amended July 10 and 23, 2009, amended August 5, 2009.
- Book 3A Supplemental Geotechnical Laboratory Test Results and Site Specific Groundwater Monitoring Plan, dated December 12, 2008, amended May 22, 2009, amended July 23, 2009.
- Book 3B Stability Analysis Review, Shake Acceleration and Output Files, 06g, Shake Output and Acceleration Files amended May 22, 2009, amended August 27, 2009, to include the Slope Stability Analysis.

- Book 4 Operations Plan and Closure and Post-Closure Plan, dated December 23, 2008, amended May 22, 2009, amended July 10 and 23, 2009, amended August 5, 2009, amended May 19, 2014.
- **Book 5** Guam Solid Waste Municipal Landfill Permit, dated December 23, 2008, amended May 22, 2009, amended July 23, 2009, amended August 05, 2009, amended May 19, 2014.
- Book 6 Section 1 General Information of the Renewal Permit Application, dated March 14, 2025.

 Section 2 Specific Information of the Renewal Permit Application, dated March 14, 2025.
- Book 7 Special Waste Acceptance Amendment & Hazardous Waste Exclusion Program, dated July 2023, submitted to GEPA in September 2023.

PART II - GENERAL PERMIT CONDITIONS

II.A. GENERAL CONDITIONS:

- 1. The terms, conditions, requirements, limitations, and restrictions outlined here are "Permit Conditions" and are binding on the Permittee and enforceable under the provisions of Guam Code Annotated (GCA), Chapter 51, Solid Waste Management and Litter Control (SWMLC) Act, Guam Solid Waste Disposal Rules and Regulations (GSWDRR), and 22 Guam Administrative Rules, Chapter 23. The Agency will periodically review the permit and retains the right to take enforcement action against any violation of the "Permit Conditions" by the Permittee, its agents, employees, servants, or representatives.
- 2. The permit shall be kept at or near the operation site for which the permit is issued and shall be available upon request [GSWDRR, §23312].

II.A.I. Effect of Permit

- a. The Permittee may dispose of solid waste within the permitted area in accordance with this permit's conditions. Any disposal of solid waste not authorized by this permit is prohibited. Subject to the 10 GCA, SWMLC, §51104(a), compliance with this permit generally constitutes compliance, for enforcement purposes, with the GSWDRR.
- b. Issuance of this Permit does not convey any property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of federal or local law, regulations, or ordinances.

- c. Compliance with the terms of this permit does not serve as a defense to any order issued or any legal action brought under 10 GCA, Chapter 51, SWMLC, and Section 7003 of the Resource Conservation and Recovery Act (RCRA), or any other law that protects public health or the environment.
- d. Issuance of this permit does not constitute approval of other applicable requirements from the federal or local government, including but not limited to Guam Air Pollution Control Standards and Regulations (GAPCSR), and Guam Soil Erosion and Sediment Control Regulations.
- e. The Permittee and all contractors of the Permittee shall be bound by this Permit and all applicable laws and regulations.
- f. The Permittee is responsible for ensuring that all contractors, subcontractors, and other persons carrying out any work related to this facility/activity shall be fully informed of all permit conditions and all applicable provisions and requirements of GSWDRR prior to commencing any solid waste management activities. The Permittee shall submit a plan to Guam EPA identifying all contractors and delineating specific responsibilities for compliance with this permit and the GSWDRR. However any such delineation of responsibility shall not be construed as preventing Guam EPA from taking any necessary enforcement actions or seeking other remedies as provided for by statute.

Prior to the initial commencement of solid waste management activities by a contractor, the contractor shall provide Guam EPA with written notice that they:

- i) understand the conditions specified in this permit;
- ii) understand all other applicable provisions and requirements of the GSWDRR:
- iii) acknowledge that they may be subject to enforcement actions for non-compliance with these requirements and regulations.

II.A.2. Permit Modification, Suspension, Revocation and Termination

This Permit may be modified, suspended, revoked, reissued, or terminated for cause, as specified in the SWMLC §51104(f) and GSWDRR §23104. The filing of a request for a permit action, or the notification of planned changes or anticipated noncompliance by the Permittee, does not stay the applicability or enforceability of any permit requirement or condition.

The permit is valid only for the specific processes and operations specified in the submitted application and additional submittals on file with the Agency. Any unauthorized deviation from the submitted application, approved drawings, operations manuals, additional submittals, or conditions of this permit may constitute grounds for revocation of this permit and enforcement action by this Agency.

II.A.3. Permit Renewal

Review of any application for a Permit renewal shall consider improvements in the state of control and measurement technology, as well as changes in applicable law or regulations. The Permittee must apply for a renewal of the permit at least one hundred eighty (180) days before the expiration date shown on the signature page of this permit [GSWDRR § 23104(b)(6)(b)].

II.A.4. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected.

This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, nor does it allow the Permittee to cause pollution in contravention of Guam Statutes and Agency rules, unless specifically authorized by an order from the Administrator.

II.A.5. Definitions

For purposes of this Permit, terms used herein shall have the same meaning as those in 10 GCA, Chapter 51 (SWMLC), GSWDRR, GHWMR, and the Consent Decree, unless this Permit specifically provides otherwise; where terms are not defined in the regulations or the Permit, the meaning associated with such terms shall be determined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term. The following words used herein, which are not defined in the SWMLC, GSWDRR, GHWMR, and the Consent Decree, are described below:

- a. Consent Decree means the decree in the United States of America v. Government of Guam, Civil Case No. 02-00022, issued on February 11, 2004.
- b. Issued date means the date the Administrator signs this permit
- c. Permittee means the Guam Solid Waste Authority (GSWA), or its designee, including the contractor(s) who operate(s) the Layon Landfill on behalf of the Government of Guam.

II.A.6. Duty to Comply

The Permittee must follow all conditions of this Permit, except where and for the duration

that the Administrator has granted prior approval for such noncompliance. Any Permit violation, other than on compliance, which has received prior authorization from the Administrator, is considered a violation of the SWMLC and the GSWDRR and can lead to enforcement actions, such as Permit termination, revocation, suspension, or modification; or denial of a Permit renewal application.

If, for any reason, the Permittee does not comply with or will be unable to comply with any condition or limitation specified in the permit, the Permittee shall notify the Agency verbally within eight (8) nours, followed by a written **Non-compliance report** within three (3) days of the verbal notification. The report shall contain the following information:

- a. A description of and the cause of non-compliance;
- b. The period of non-compliance, including exact dates and time, or, if, not corrected, the anticipated time of non-compliance is expected to continue; and
- c. Steps being taken to reduce, eliminate, prevent recurrence of the non-compliance.

II.A.7. Permit Expiration

Pursuant to GSWDRR §23104(g), this Permit remains valid for five (5) years from the date of issuance. If a timely renewal application is submitted and the renewal process is not completed by the expiration date, the permit will still be enforced until the renewal is either approved or denied.

II.A.8. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee, in an enforcement action, that it would have been necessary to halt or reduce the Permitted activity to maintain compliance with the conditions of this Permit.

II.A.9. Duty to Mitigate

In the event of noncompliance with this Permit, the Permittee shall take all reasonable steps to minimize releases to the environment. It shall implement measures that are reasonable to prevent significant adverse impacts on human health or the environment, and to come into compliance as rapidly as possible.

II.A.10. Proper Operation and Maintenance

The Permittee shall at all times properly operate and maintain all facilities, equipment, contracts, and systems of treatment and control (and related appurtenances) that are installed or used by the Permittee or its contractors to achieve compliance with the conditions of this permit, as required by the Agency's rules and regulations.

II.A.11. Duty to Provide Information

a. The Permittee shall furnish to the Administrator, when specified by Guam EPA, any information required by law which is needed to determine compliance with the permit.

- to determine whether cause exists for modifying, revoking, reissuing, or terminating this Permit, or
- ii. to determine compliance with this Permit or any applicable environmental requirements.
- b. The Permittee shall also furnish to the Administrator, upon request, copies of records required to be kept by this permit.
- c. Whenever the Permittee becomes aware that it failed to submit any relevant facts in the permit application or in any report, notification, or submission, or that it submitted incorrect information in a permit application or in any report, notification, or submission to the Administrator, the Permittee shall promptly submit such facts or information.

II.A.12. Inspection and Entry

Pursuant to the SWMLC §51106, the Permittee, by accepting this permit, specifically agrees to allow the Administrator or their designee, upon presentation of credentials or other documents required by law, access to the premises at reasonable times where the permitted activity is located or conducted for the purpose of:

- a. Having access to and receiving copies of any records that must be kept under the conditions of the permit or regulations.
- Inspecting the facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit or regulations; and
- c. Sampling or monitoring any substances or parameters at any location reasonably necessary to ensure compliance with this permit or Agency rules.

Reasonable time may depend on the nature of the concern(s) being investigated and when specified by Guam EPA.

II.A.13. Monitoring and Records

The Permittee shall comply with the following monitoring and record requirements:

- i. The Permittee shall retain at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), copies of reports required by this permit, and records of all data used to complete the application for this permit. The time period for the retention shall be at least five (5) years from the date of the sample, measurement, certification, record, report or application unless otherwise specified by the Agency's rules and regulations.
- ii. Upon request, the Permittee shall furnish all records and plans required under Agency rules [GSWDRR § 23312]. The retention period for all records will be extended automatically, unless otherwise stipulated by the Agency, during the course of any unresolved enforcement action.
- iii. Records of all monitoring information shall include:
 - a. the dates, exact place, and times of sampling or measurements;
 - the person responsible for performing the sampling or measurement;
 - c. the date(s) the analyses were performed;
 - d. the person responsible for performing the analyses;
 - e. analytical techniques or methods used; and
 - f. results of such analyses...

II.A.14. Reporting Planned Changes

The Permittee shall immediately notify the Administrator of any planned physical alterations or additions to the Permitted facility.

II.A.15. Transfer of Permits

a. This permit is not transferable, whether by operation of law or otherwise, either from one location to another, from one solid waste disposal facility to another or from one person to another, without the written approval of the Administrator [GSWDRR § 23104(I)].

The Administrator may require suspension, termination, modification, revocation, or reissuance of the Permit as required by GSWDRR §23104(h), (i), and (j).

- b. Before transferring ownership of or contracting for the operation of the facility or implementation of closure activities or post closure care, the Permittee shall notify the new owner or operator in writing of the requirements of the SWMLC, GSWDRR and this permit.
- c. Copies of the notification shall be provided to the Administrator concurrent with notification to the owner or operator.

The Permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Administrator.

II.A.16. Twenty-Four Hour Reporting

The Permittee must notify the Agency immediately of any incidents such as fire, explosion, or release of regulated substances or waste that could threaten human health or the environment (including air, soil, surface, and sub-surface waters). Initial notification should be made by calling 911 to the local Fire Department. The Incident Report must be submitted within three (3) days and should include the following information:

- a. Name, address, and telephone number of the owner and operator;
- b. Name, address, and telephone number of the facility at which the incident occurred;
- c. Name and quantity of material/waste (i.e. polychlorinated biphenyls, hazardous wastes, petroleum contaminated soils, etc.) involved;
- d. The extent of injury, if any;
- e. Date, time, and type of incident (i.e. fire, explosion, release of regulated substance/waste etc.):
- f. An assessment of actual or potential hazards to human health or the environment, where applicable; and
- g. Estimated quantity and disposition of recovered and unrecovered material that resulted from the incident.

II.B. SIGNATORY REQUIREMENT

- 1. All applications, reports, or information submitted to or requested by the Administrator shall be signed and certified by the Receiver during the period that the facility remains under the control of the Receivership; and after the Receivership, the public official designated pursuant to GSWDRR §23104(b)(3).
- Except as otherwise specifically stated, all reports, notifications, or other submissions required by this permit or requested by the Administrator shall be either sent by certified mail to:

Administrator
Guam Environmental Protection Agency
Building 17-3304, Mariner Ave.
Tiyan, Barrigada, Guam 96921

3. All reports, notices, and other submissions to Guam EPA shall be signed and affirmed by

a responsible official of the Permittee using the following certification statement:

I certify under penalty of law that I have examined and am familiar with the information submitted in this document and all attachments. I confirm that this document and its attachments were prepared either by me personally or under my direction or supervision, in a manner designed to ensure that qualified and knowledgeable personnel properly collected and presented the information. I also certify, based on my personal knowledge or my inquiry with those immediately responsible for obtaining the information, that the information is true, accurate, and complete. I understand that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing and willful submission.

II.C. REPORTING REQUIREMENTS

As required by Book 4, Sections 9 and 10 of the Operations Plan, reports shall be submitted to Guam EPA annually or as specified. These reports shall include:

- a. Total refuse tonnage accepted;
- b. Refuse tonnage accepted from small haulers and private individuals;
- c. Data on waste excluded (volumes, character, load count, and tonnage if possible);
- Record of location (waste management unit, cell, etc.) where special wastes are located;
- e. Scale data of recyclable tonnage and types accepted;
- f. Explosive Gases Control (Gas Monitoring) shall be conducted and submitted Quarterly in accordance with § 23306 GSWDRR;
- g. Leachate collection and treatment monitoring results;
- h. Cover material usage;
- Detection Monitoring Program (Groundwater Monitoring) shall be conducted and submitted semi-annually in accordance with § 23505 GSWDRR;
- Discussion on pending designs, construction, or expansion plans; and
- k. Other items as directed by the Administrator.

The Annual Operating Reports shall include the following Information:

- a. Discussion and summaries of the quarterly report data, including tracking of trends throughout the year, as well as historical trends;
- b. Total annual and cumulative volumes of refuse placed and cover material excavation, based on controlled topographic surveys;
- Quantities of semi-solid liquid waste (tons) received and how they are handled or disposed.
- Quantities of leachate (gallons) generated and how it was handled or disposed of.
- e. Proposed refuse placement for the upcoming year and cover soil excavation plans;
- f. Updated estimates for landfill closure and post-closure maintenance costs, and updated financial assurance information;
- g. On or before July 31 of each year, the Permittee shall submit an annual topographic survey of the site as prepared by a land surveyor registered in the island of Guam or an approved alternate method. This survey shall

clearly show the horizontal and vertical dimensions of the landfill area, and locations and spot elevation of the settlement monument with comparisons with baseline year 2011; and

h. Other pertinent details required by the Administrator.

II.D. FINANCIAL ASSURANCE

The Permittee shall comply with the following financial assurance criteria GSWDRR §§ 23701, 23702, 23703, 23704, 23705, and Book 4, Closure and Post-Closure Plan, Section 7. In addition, the Permittee shall maintain the approved financial assurance mechanism ("State Assumption of Responsibility") as specified in the permit documents at all times throughout the active life of the landfill, and during the required post-closure care period. The amount of funds assured must be sufficient to cover the costs of closure, post-closure care, and corrective action for known releases when needed, and shall be made available in a timely fashion when needed. The estimated landfill closure and post-closure care costs shall be updated annually, and the amount of funds assured shall be adjusted as necessary to account for changes to these costs, as well as any corrective actions that may become required under the GSWDRR. All facility Annual Operating Reports must contain updated cost estimates and updated information on the status of the financial assurance mechanisms.

- a. A "pledge of revenue" that appropriate funding will be allocated for closure and post-closure expenses. The Permittee shall establish a separate account for the closure and post-closure of the MSWLF. Furthermore, a percentage of the tipping fee shall be allocated to this account, and
- b. Annual update of closure and post-closure cost estimates.

II.E. INCAPACITY OF OWNERS OR OPERATORS, GUARANTORS, OR FINANCIAL INSTITUTIONS

- The Permittee shall notify the Administrator by delivery of the commencement of a voluntary or involuntary proceeding in any bankruptcy, including bankruptcy under Title 11, U.S. Code, naming the owner or operator as debtor, within 10 days after commencement of the proceeding. A guarantor of a contractor must make such a notification if he is named as debtor.
- 2. The Permittee who fulfills the requirements of financial assurance by obtaining a trust fund, surety bond, letter of credit, other local approved mechanism, or insurance policy will be deemed to be without the required financial assurance or liability coverage in the event of bankruptcy of the trustee or issuing institution, or a suspension or revocation of the authority of the trustee or institution to act as trustee or of the institution issuing the surety bond, letter of credit, or insurance policy to issue such instruments. The Permittee must establish other financial assurance or liability coverage within 60 days after such an event.

II.F. CONFIDENTIAL INFORMATION

Unless the submitted documents and other information secured by the Agency from the Permittee contain confidential information, such as secret processes or manufacturing methods, they shall be made available for public inspection [5 GCA, Chapter 10, and Freedom of Information].

II.G. DOCUMENTS TO BE MAINTAINED AT THE FACILITY DURING OPERATIONS

The Permittee shall keep at the facility and at the Guam Solid Waste Authority Main Office, until the closure is completed and certified by an independent, registered professional engineer, and the Administrator provides written approval that the Permittee may remove them, the following documents along with all amendments, revisions, and modifications to these documents.

- Summary of Layon Landfill's Solid Waste Acceptance Plan, as required by GSWDRR §23312(a)(8) and this Permit.
- 2. Inspection schedules and plans, as required by GSWDRR §23312(a)(2).
- 3. Personnel Training Program Plan and personnel training documents and records, as required by GSWDRR 23312(a)(2).
- 4. Emergency Contingency Plan, as required by this Permit.
- Hazardous Waste Exclusion Program, as required by this Permit and GSWDRR §23303.
- 6. Operating record, as required by GSWDRR §23312(a)(9).
- 7. Closure Plan as required by GSWDRR §23312(a)(6).
- Post-Closure Care and Maintenance Plan, as required by GSWDRR §23312(a)(6).
- 9. Annually adjusted cost estimate for facility closure and post-closure, as required by GSWDRR §23312(a)(7).
- 10. Gas Monitoring Plan and Sampling and Analysis Data, as required by GSWDRR §23312(a)(3).
- 11. Ground-water Monitoring Plan and Sampling and Analysis Data, as required by GSWDRR §23312(a)(5).
- 12. Surface Water Monitoring Plan and Sampling and Analysis Data, as required by

this Permit.

- 13. Final Filling Plan and Layon Landfill Assessment Report, as required by this Permit.
- 14. Operations Plan, as required by GSWDRR §23104(b)(1)(C).
- 15 Vector Control Monitoring Plan and Deterrence Program, as required by GSWDRR §23312(a)(11).
- 16. Special Waste Recordkeeping, as required by this Permit.

PART III - CONSTRUCTION

III.A. DUTY TO FOLLOW PLANS & SPECIFICATIONS

The Permittee (and its contractor(s)) shall construct the municipal solid waste landfill units and all appurtenances in accordance with the plans and specifications submitted and approved by Guam EPA as part of the permit application, and in accordance with GSVVDRK § 23401. Any proposed modifications or changes to the Guam EPA-approved plans and specifications shall be submitted to Guam EPA for review and approval prior to constructing the modification or change. All plans must be updated to include all approved modifications or changes.

Any future municipal solid waste cells at the Layon landfill site shall be constructed with liners and leachate collection systems similar to the approved liner system for Cells 1 and 2, and meeting the requirements of GSWDRR § 23401. Construction of any new disposal cell or area will require submittal of design plans and drawings, a construction quality assurance/quality control plan, and an application for a new permit, all subject to the requirements of GSWDRR § 23104(b). The Permittee shall adhere to a Guam EPA approved Dust Control Plan for the duration of the construction.

III.B. CONSTRUCTION QUALITY CONTROL AND CONSTRUCTION QUALITY ASSURANCE (CQC/CQA)

Prior to construction of any landfill cell, sub-cell, engineered control system, waste treatment facility, or final cover, the Permittee shall submit construction design drawings and a Construction Quality Control and Construction Quality Assurance (CQC/CQA) Plan to the Administrator for approval. Buildings do not require approval from Guam EPA. The Permittee shall construct any landfill cell, sub-cell, cell liner, engineered control system, waste treatment facility, and the final cover in accordance with the design drawings and CQC/CQA Plans submitted and approved by the Administrator.

Subsequent to construction, the Permittee shall notify the Administrator of completion of construction of any landfill cell, sub-cell, engineered control system, waste treatment facility, or final cover. Landfill cells may not be used for treatment or disposal of waste until all CQC/CQA documents and construction related documents including as-built drawings are approved by the Administrator and local building official (DPW). The Permittee shall submit as-built drawings for each construction event that are signed and sealed by a professional engineer registered in the Territory of Guam.

The Permittee shall notify the Administrator of any proposed incremental closure, placement of any part of the final cover, or placement of the full final cover. Construction of any portion of the final cover shall be considered as a separate construction event and shall be approved separately from any other construction or expansion of the landfill. Design approval must be received from the Administrator prior to construction and must be accompanied by a CQC/CQA Plan, for each construction event where incremental or final closure is performed.

A qualified party, independent of the owner and construction contractor shall perform the quality assurance function on earthen components, liner components, cover components, and other testing as required by the approved CQC/CQA Plan. The qualified party shall be supervised by a registered engineer. The final documentation, which contains all construction reports and results, must be submitted in a final documentation report, including as-built drawings to the Administrator.

The final documentation report and all engineering drawings submitted to the Administrator must be stamped and approved by a professional engineer with a current registration in Guam.

III.C. CERTIFICATION OF CONSTRUCTION OR MODIFICATION

The Permittee shall not commence disposal of solid waste within future Cells until the Permittee has submitted to the Administrator, by certified mail or hand delivery, a letter signed by the Permittee and a registered professional engineer licensed in the Territory of Guam stating that the facility has been constructed or modified in compliance with the permit, design, construction quality assurance plan, and any Guam EPA approved design modification; and

- The Administrator has reviewed the final documentation report, and found it to be complete and accurate;
- b. The Administrator has inspected the modified or newly constructed facility and finds it is in compliance with the conditions of the permit; or
- c. The Administrator has either waived the inspection or has not within 15 days notified the Permittee of his intent to inspect.

PART IV – OPERATIONS

IV.A. OPERATIONS PLAN

IV.A.1. Operations Plan, General

The Operations Plan included in the permit application and the solid waste permit issued by the Administrator must be kept onsite and readily accessible at the landfill, and it should be kept current with all approved revisions by Guam EPA. The landfill must be operated according to the Operations Plan as included in the permit application. If needed, the facility owner may change the Operations Plan, provided that the modification complies with all requirements of GSWDRR § 23104(h), remains as protective of human health and the environment as the version approved in the permit application, and receives approval from the Administrator as a minor modification under GSWDRR § 23104(h). Any changes to the Operations Plan must be documented in the operating record.

Any modification to the Operations Plan must be submitted to the Administrator for approval and is considered a minor permit modification in accordance with GSWDRR § 23104(h), unless the Administrator determines the change should be subject to public comment under SWMDLC § 51104(d)(1) and (2).

IV.A.2. Solid Waste Accepted

This permit is for the disposal of non-hazardous solid waste that may include municipal solid waste, commercial waste, and special waste as allowed by GSWDRR § 23301(b), Book 4, Operations Plan, Appendix B, Book 7, and the Administrator.

IV.A.3. Solid Waste Excluded

The Permittee shall implement GSWDRR § 23302 and Book 4, Operations Plan, Appendix B, for those solid wastes excluded for disposal.

No hazardous waste as defined by GSWDRR § 23102(45), SWMLC § 51102(10), Guam Hazardous Waste Management Regulation (GHWMR) [40 CFR 260.10 [40 CFR Part 261.3]], or Polychlorinated Biphenyls (PCBs) as defined under the Toxic Substances Control Act (TSCA), 40 CFR Part 761 shall be accepted for treatment, storage, or disposal at the landfill. Any prohibited waste received and accepted for disposal at the facility will constitute a violation of this permit [SWMLC § 51111]. The solid wastes excluded from the MSWLF include, but are not limited to, junk vehicles, appliances, PCB wastes, contaminated soils (petroleum), Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) contaminated soils, e-wastes, DIY used motor oil, batteries, radioactive wastes, solvents, paints, oily wastes, acids, corrosives, green wastes, industrial wastes, explosives, sludge, and construction & demolition debris, with

the exception of Asbestos Containing Material (ACM), which is considered a special waste unless otherwise indicated within this permit.

No containers larger than one (1) gallon household size holding any liquid, non-containerized material containing free liquids, or any waste containing free liquids in containers larger than one (1) gallon shall be disposed of at the landfill [SWMLC § 23311].

The Permittee shall implement a screening program at the entrance of the facility to ensure that only acceptable solid wastes enter the facility. If the facility inadvertently accepts unacceptable wastes or receives unacceptable wastes from transfer stations, the Permittee shall properly manage and dispose of the unacceptable materials (wastes), in accordance with applicable federal and local laws and regulations prior to causing a nuisance, health, or environmental threat.

IV.A.4. Procedures for Excluding the Receipt of Hazardous Waste

The Permittee shall operate the landfill in accordance with the approved Waste Exclusion Plan contained in Book 4, Operations Plan, Appendix B, GSWDRR § 23302 and § 23303 to ensure that regulated hazardous wastes and PCB wastes are not disposed of at the landfill.

IV.A.5. Special Wastes

Special wastes may be accepted in accordance with Book 4, Operations Plan, Appendix B, and Book 7, Amendment to the Special Waste Acceptance and Hazardous Waste Exclusion Program, which outline procedures for accepting and disposing of the listed special wastes.

- a. **Infectious Wastes.** Infectious waste cannot be disposed of at any solid waste facility unless it is incinerated, sterilized, or otherwise rendered non-infectious in accordance with Book 4, Operations Plan, Section 5.6.3, and 22 GAR, Chapter 22, Section 20114(a);
- b. Dead Animals and Offal. The Permittee shall immediately place a minimum of two (2) feet of soil over any accepted dead animals, offal, or odorous waste. The cover soil shall be compacted and be of sufficient thickness (2 feet or more) to control the release of odors [Book 4, Operations Plan, Section 5.6];
- c. **Sewage Sludge** meeting the no free liquids requirement as defined by EPA Test Method 9095 (Paint Filter Liquids Test); and
- d. Asbestos Waste which meets the requirements set forth in 40 CFR Part 61, National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations, 29 CFR 11910.1001, Department of Transportation (DOT) 49 CFR 100 – 199, GAPCSR, Section 1103.14 and Book 4 (2009), Operations

- Plan, Appendix C and Book 7 (2023), Amendment to the Special Waste Acceptance and Hazardous Waste Exclusion Program.
- e. Non-Hazardous Contaminated Soil that meets the Pacific Basin Environmental Screening Levels / Tropical Pacific Environmental Screening Levels (TPSELs) criteria for industrial soils can only be used as ADC, in accordance with Book 7, Amendment to the Special Waste Acceptance and Hazardous Waste Exclusion Program (2023) of Layon Municipal Sanitary Landfill.
- f. **Non-hazardous Mandblast Media** can be disposed of in the landfill as waste or as ADC, provided it is not at risk of becoming airborne and complies with the requirements outlined in the Layon Municipal Sanitary Landfill Book 4 and Book 7.
- g. Non Hazardous Treated or Painted Wood Products, in accordance with Book 7, Amendment to the Special Waste Acceptance and Hazardous Waste Exclusion Program (2023) of Layon Municipal Sanitary Landfill:
 - Non-Hazardous Treated Wood treated with waterborne, creosote, and oilborne preservatives.
 - Painted wood products may include paint manufactured with oil, lead, and other metals that are known to cause human health impacts if inhaled or ingested.
- h. The locations where all special wastes are buried shall be documented and reported according to the record keeping and reporting requirements outlined in the Operations Plan and permit.

IV.A.6. Cover Material Requirements

The Permittee shall comply with GSWDRR § 23304, 23305, 23306, 23307, and Book 4, Operations Plan to ensure that the solid waste received at the landfill is completely covered at the end of each workday with a minimum of six inches of earthen material. Aggregate size shall be less than 2.5 inches and well-graded. Additionally, the earthen material shall be indigenous to Guam and free of any contamination from hazardous constituents, substances, and/or wastes.

A request to use an Alternative Daily Cover (ADC) as cover must be submitted to the Guam EPA. The request should assess the proposed ADC's specific features and its suitable use at the facility. The Agency requires a demonstration period of six (6) months to show that the ADC and its thickness can control disease vectors, fires, odors,

nuisances, litter [GSWDRR § 23305, 23306, and 23307], and scavenging without threatening human health and the environment. The Permittee must obtain Agency approval before starting the demonstration project. The use of ADC is limited to the daily cover period; the Permittee shall report on the ADC's performance, specific features, and proper use at the facility. The demonstration period or the approved use of an ADC may be rescinded or canceled by either the Agency or the Owner/Operator at any time without cause.

Records shall be maintained on file at the facility, and information within verified as to its authenticity by the appropriate personnel. The daily cover monitoring verification shall include digital photos of the workface, quantitative records of daily waste disposed, approximate cell dimensions, and daily soil cover used in tons and cubic yards.

IV.A.7. Vectors, Birds, Odors, Noise, Dust, and Litter Control

The Permittee shall comply with GAPCSR, GSWDRR § 23305 and Book 4, Operations Plan, Section 6, Maintenance and Control for the reduction of vectors, odor, litter, mud and dust.

The Permittee shall provide measures to evaluate, prevent, and/or control on-site populations of disease vectors and minimize nuisance conditions, and document any associated activities. At a minimum, such measures shall be taken on a monthly basis. The measures shall meet the requirements of GSWDRR § 23305.

The Permittee shall implement measures to minimize free litter in the landfill and prevent it from leaving the property line of the facility. Throughout the operational day, all windblown material shall be collected and properly disposed of. The measures shall, at a minimum, include:

- a. The use of portable litter screen which shall be deployed within 100 yards of the active workforce:
- b. The use of permanent or semi-permanent litter screen or fences in primary and secondary control positions;
- c. Litter clean-up in the event of major storm or other incident in which litter escapes the normal litter containment systems; and
- d. Provision for a truck clean-out area near the active workface that shall have litter control fencing and disposal receptacles for truck clean-out.

The Permittee must implement measures to reduce mud tracking onto public roads and dust generation from onsite vehicle traffic. These measures should include regular road maintenance and cleaning, a wet-weather disposal area, and a truck wheel cleaning station for vehicles before they leave the site. Possible truck or wheel cleaning methods that may be used include rumble strips, drive-through tire washes, trash clean-out pads, and wash pads.

Dust control measures such as water sprays and barriers shall be established for the site. Dust monitoring shall be conducted, if needed.

IV.A.8. Explosive Gases Control/Landfill Gas Monitoring

The Permittee shall monitor explosive gases at the landfill in accordance with the Gas Monitoring Plan contained in the permit application and shall otherwise meet the requirements of GSWDRR § 23306, GAPCSR, and Book 4, Operations Plan, Section 6.8. If necessary, the Permittee may modify the Gas Monitoring Plan, provided that the modification meets all of the requirements of GSWDRR § 23306 and is as protective of human health and the environment, and approved by the Administrator as a minor modification under GSWDRR § 23104(h). Any modification to the Gas Monitoring Plan shall be noted in the operating record.

If the concentrations of explosive gases at any of the facility structures, at the property boundary, or beyond the property boundary ever exceed the standards set in GSWDRR § 23306 and Book 4, Operations Plan, Section 6.8, the Permittee shall immediately take all necessary steps to ensure protection of human health and notify the Administrator. Within seven (7) days of detection, place in the operating record the explosive gas levels detected and a description of the immediate steps taken to protect human health. Implement a remediation plan that meets the requirements of GSWDRR § 23306 and Book 4, Operations Plan, Section 6.8 and shall submit the plan to the Administrator prior to implementation.

IV.A.9. Air Criteria

The Permittee shall comply with the air criteria requirements specified in GSWDRR §23307, SWMLC § 51110(8), GAPCSR, Section 1103.11, and Book 4, Operations Plan, Section 6.3. and Book 7, Amendment to the Special Waste Acceptance and Hazardous Waste Exclusion Program (2023), Section 3 Special Waste Sampling and Analysis.

The Permittee shall manage the landfill to control wind dispersal of dust and particulate matter in accordance with GAPCSR, Section 1103.4, and Book 4, Operations Plan, Section 6.3.

IV.A.10. Access Requirements

The Permittee is responsible for providing measures to control public access in accordance with SWMLC § 51107, GSWDRR §23308, and Book 4, Operations Plan, Section 5.1 and 6.1. In addition, public access will be controlled to minimize unauthorized vehicular traffic, unauthorized and illegal dumping, and public exposure to hazards associated with waste management.

When natural barriers no longer prove to be an effective means of providing control access, then fences and gates shall be provided to meet the requirements of controlled access. All gates shall be kept locked when an attendant is not on duty.

IV.A.11. Surface Water Run-on and Run-off Control Systems

The Permittee shall at all times operate and maintain all drainage channels, detention (ponding) basins and other run-on/run-off control structures and systems in accordance with GSWDRR § 23309 and § 23310 and Book 4, Operations Plan, Section 6.10.4, Annual Surface Water Management Plan and Book 7, Amendment to the Special Waste Acceptance and Hazardous Waste Exclusion Program (2023), Section 3 Special Waste Sampling and Analysis.

IV.A.12. Impact Buffer Area

The Permittee shall manage an Impact buffer area, which shall include any adjacent public roads or environmentally sensitive areas, by maintaining appropriate fire break and controlling litter. The buffer area to be managed shall be identified within the Operations Plan drawings and agreed upon by the Agency.

IV.A.13. Liquid Restrictions

The Permittee shall provide measures to restrict the disposal of bulk or non-containerized liquid in accordance with GSWDRR § 23311 and Book 4, Operations Plan, Section 8.9.

IV.A.14. Safety

The Permittee shall comply with GSWDRR § 23313 and Book 4, Operations Plan, Section 6.12, Safety Procedures. Facility personnel shall be trained in the proper procedures for maintaining health and safety.

IV.A.15. Facility Operating Hours

The Permittee is authorized to accept waste and operate during the following timeframes:

Normal hours of operation and waste acceptance are from 7:00 a.m. to 5:00 p.m., Monday through Friday and 7:00 a.m. to 3:00 p.m. on Saturday. Transfer loads may also be accepted as early as 5:00 a.m., Monday through Saturday. The facility will be closed on Sundays, New Year's Day, and Christmas Day.

Alternate waste acceptance hours and alternating operating hours may be required for special occasions, special purpose events, holidays and other special occurrences. For these days, the operator/owner operating hour may be extended by two (2) hours.

When warranted, the owner/operator shall request approval from Guam EPA to allow additional temporary operating hours to address disaster or other emergency situations, or other unforeseen circumstances that could result in the disruption of waste management services in the area. The facility owner/operator shall document the reasons for the delay for each day on which a delay occurs and place the documentation in the operating record.

IV.A.16. Adequate Equipment and Personnel

The Permittee shall operate and maintain the Municipal Solid Waste (MSW) landfill facility to include provisions for back-up personnel and equipment. At an average operating rate of <u>less than 400 tons per day</u> of MSW, the site shall have a minimum of one (1) dozer, one (1) compactor, one (1) water truck, and one (1) spotter. At an average rate <u>greater than 400 tons per day</u> of MSW, the site shall have additional equipment and personnel as designated by the owner/operator, sufficient to meet on-site operating needs, and is expected to consist of a minimum of two (2) dozers, two (2) compactors, one (1) water truck, and two (2) spotters, or the equivalent as substituted by the owner/operator and provided in writing to the Agency. These equipment and personnel requirements shall be met unless otherwise approved by the Agency.

IV.A.17. General Inspection Requirements

The Permittee shall inspect the facility to prevent malfunctions and deterioration, operator errors, and discharges that may cause or lead to the release of wastes or contaminated materials to the environment or create a threat to human health or the environment. These general inspections shall be completed quarterly and shall cover, at a minimum the following areas: Waste placement, compaction, cover; cell liner; leachate collection system; fences and access controls; roads; run-on/run-off controls; ground water monitoring wells; final and intermediate cover; litter controls; and records. A record of the inspections shall be placed in the daily operating record on the day of the inspection. Areas needing correction, as noted on the inspection report, shall be corrected in a timely manner. The corrective actions shall be documented in the daily operating record.

IV.A.18. Personnel Training

The Permittee shall provide training for on-site personnel in landfill operation, including, but not limited to, waste load inspection, hazardous waste identification, and personal safety and protection; and in accordance with the training provisions contained in Book 4, Operations Plan approved by Guarn EPA.

Within 24 months after issuance of this permit, landfill operations shall be supervised at all times by an individual who has received a Manager of Landfill Operations training course conducted by the Solid Waste Association of North America or a comparable organization as determined by the Agency. Records of such training shall be placed in the Operating Plan files.

The facility shall have a Site Manager and/or Environmental Compliance Officer, who shall be knowledgeable of Guam's solid waste laws, regulations, this permit conditions and the permit application component including the Operations Plan.

IV.A.19. Emergency Response and Contingency Plan

The emergency and contingency plan shall be designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of harmful constituents to air, soil, or surface water.

Upon issued date, the Permittee shall implement the provisions of *Operations Plan,* Appendix A, Section 3.11–Emergency Response, as amended by Guam EPA. In addition, the Permittee shall comply with the following conditions:

a. Within thirty (30) calendar days of the issued date, the Permittee shall submit to Guam EPA, a revised Emergency Contingency Plan (Appendix A, Permit

Attachment II-6) to include the following:

- Describe the arrangements agreed to by local police departments, fire departments, hospitals, contractors, and federal and local emergency response teams to coordinate emergency services.
- ii. List names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinator, and this list shall be kept up to date. Where more than one person is listed, one must be named as primary emergency coordinator and others shall be listed in the order in which they will assume responsibility as alternates.
- iii. Include a list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment), where this equipment is required. This list shall be kept up to date. In addition, the plan shall include the location and a physical description of each item on the list, and a brief outline of its capabilities.
- iv. Include an evacuation plan for facility personnel which describes signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes (in cases where the primary routes could be blocked by releases of hazardous waste, harmful constituents, or fires).
- b. The Permittee shall implement the approved revised Emergency Contingency Plan (ECP).
- c. The Permittee shall notify Guam EPA within 24-hours when implementing the ECP.

IV.A.20. Salvaging of Wastes

Scavenging or salvaging of wastes at the facility is prohibited.

IV.A.21. Permanent Sign

The Permittee shall post permanent signs at each entrance and/or exit at the facility identifying the facility, the hours and days of operation, and the name and address of the owner/operator, an emergency telephone number, and other pertinent information (waste accepted or not accepted). [Book 4, Operations Plan, Section 3.9.6] and [Book 7, Amendment to the Special Waste Acceptance and Hazardous Waste Exclusion Program (2023), Section 3.6.4.]

IV.B. LANDFILL GAS MANAGEMENT SYSTEM

IV.B.1. Landfill Gas Collection and Removal System

The Permittee shall comply with the Title V Air Permit for the facility. Federal New Source Performance Standards (NSPS) regulation requires the design and installation of a gas collection system after the landfill reaches the threshold of 50 mega grams per year (Mg/yr) of None-Methane Organic Compound (NMOC). In accordance with the Title V Air Permit, the Permittee shall:

- 1) monitor landfill gas generation and submit annual NMOC reports;
- 2) submit a design plan within one year of the first report that shows a calculated NMOC rate that equals or exceeds 50 Mg; and
- install, maintain, and operate a collection and control system within 30 months of the first report that shows a calculated NMOC rate that equals or exceed 50 Mg.

In addition to the distribution specified in the Title V Air Permit, a copy of these reports shall also be submitted to Guam EPA's Solid Waste Management Program of the Air and Land Division.

The Permittee shall submit a landfill gas sampling and analysis plan for approval prior to the acceptance of waste. Prior to any construction of the landfill gas collection and removal system, the Permittee shall submit final design documents for review and approval by Guam EPA.

IV.B.2. Landfill Gas Treatment and Disposal

The Permittee shall obtain all permits required for the treatment and or disposal of landfill gas prior to the construction and operation of the landfill gas collection and removal system. Such permits may include air emissions permits for the operation of flares, underground or aboveground storage tank permits for the collection of condensate, and disposal permits for the discharge of collected condensate.

The landfill shall be assessed for the viability of energy recovery from the gas production.

IV.C. LEACHATE MANAGEMENT SYSTEM

IV.C.1. Leachate Collection and Removal System (LCRS)

The Permittee shall construct and operate the Leachate Collection and Removal System in accordance with the Guam EPA approved design plans, construction quality assurance plans, operations plans, closure plan, and post-closure plans. The leachate collection system shall be designed to maintain less than a thirty-centimeter head on any portion of the liner system per GSWDRR 23401.

Installation of any geosynthetic liner shall be performed by an experience installer who has installed a minimum of 500,000 square feet of similar type liners or shall be performed under the supervision of the manufacturer. An experienced CQA/CQC landfill inspector, who is employed by the qualified CQA/CQC party, who has at least five (5) years of experience in landfill CQA, and is supervised by the CQA/CQC party's registered engineer, shall observe liner installation and grade elevations. The Permittee shall notify the Agency in writing, five (5) days prior to any liner installation work.

IV.C.2. Leachate Management & Monitoring

Collected leachate must be managed in accordance with the design plans and reports contained in Book 4, Closure and Post-Closure Plan, Section 2.4, Leachate Management.

The leachate collected from the facility will be managed through a wastewater treatment system operated by the Guam Waterworks Authority (GWA) and no leachate pretreatment will be performed at the facility. The final agreement between GWA and the Permittee documenting this arrangement and the terms and conditions of acceptance is appended to this permit and the Operations Plan by the Permittee.

Should GWA indicate a change to the appended leachate acceptance that will result in pretreatment or other management practices or changes at this facility, the Permittee shall:

- (1) Notify Guam EPA in writing within 24 hours of being notified by GWA that leachate will not be accepted and will result in pretreatment or other management practices or changes at the facility.
 - (a) This written notification shall list the short-term contingency measures contained within the Operations Plan that the Permittee will implement, pending Guam EPA approval for pretreatment or other management practices or changes at this facility.
 - (b) Within ten (10) working days following notification from GWA, the Permittee shall submit a revised Operations Plan, including a Leachate Management Plan to Guam EPA.

(c) Changes or additions to the Operations Plan, including the Leachate Management Plan must be approved by Guam EPA and incorporated, as appropriate, into the permit conditions, as appropriate, prior to any changes in leachate management.

If GWA notifies the Permittee of changes to leachate acceptance that do not result in any pretreatment, or other management practices or changes at this facility, the Permittee shall:

- (2) Notify Guam EPA in writing within five (5) working days following notification from GWA.
 - (a) This written notification shall include the revised arrangement between GWA and the Permittee and the terms and conditions for acceptance.

No solid wastes shall be disposed of into any new cells or sector until an experienced professional engineer registered in the Territory of Guam certifies completion of construction in accordance with approved drawings and the Agency completes inspection of each new sector. The Permittee shall coordinate the inspection of each new sector by the Agency with the presence of the design engineer and on-site facility operator.

IV.D. SUBDRAIN MONITORING

Monitoring of subdrain discharge is not required unless leachate is detected in the secondary Leachate Collection and Removal System (LCRS). Detection of leachate in the secondary LCRS shall be determined by measurable discharge from the secondary LCRS sump pump.

Upon detection of leachate in the secondary LCRS, the Permittee shall monitor the subdrain discharge monthly for leachate indicator parameters. The Permittee shall submit for Guam EPA's approval, a list of indicator parameters for the subdrain monitoring based on compounds expected to be found in the leachate. If leachate indicator parameters are detected above background levels in the subdrain discharge, the Permittee shall be required to perform batch monitoring of subdrain discharge. Liquid collected from the subdrain system shall be stored onsite and not discharged until such time sampling and analysis results indicate the liquid is free from contamination by leachate. Monitoring of liquid in the aboveground storage tank shall be completed when the aboveground storage tank is partially full, and results from laboratory shall be obtained on a quick turnaround basis. Subdrain monitoring results shall not exceed Guam Water Quality Standards prior to discharge.

The Permittee shall submit a Subdrain Monitoring Plan and Subdrain Discharge Release Plan prior to the start of operations. The plans shall include, at a minimum, provisions for sampling quality assurance and quality control, a list of analytes designed to indicate the presence of leachate, and proposed limits and evaluation procedures for determining when contamination from leachate is present in the subdrain liquid.

Alternatively, the subdrain liquid may be collected and discharged into the leachate collection system for treatment and disposal.

The Permittee shall provide details on the aboveground storage tank proposed manufacturer/local supplier prior to accepting waste at the landfill.

IV.E. GROUND-WATER MONITORING AND CORRECTIVE ACTION

Following installation of the groundwater monitoring well network prior to construction, the Permittee shall evaluate the monitoring data and confirm that the background groundwater quality in the hydraulically up gradient or background wells have been obtained for each of the monitoring parameters or constituents required in the groundwater monitoring program (§ 235504(e)). If additional groundwater monitoring wells are required, the Permittee shall submit a plan, receive plan approval from Guam EPA, and complete the installation of the additional monitoring wells prior to acceptance of waste.

The Permittee shall monitor the ground water underlying the landfill in accordance with the Ground Water Monitoring Plan and the Ground Water Monitoring Quality Assurance/Quality Control Plan contained in the permit application.

if necessary, the Permittee may modify the Ground Water Monitoring Plan and the Ground Water Monitoring Quality Assurance/Quality Control Plan, provided that the modification meets all of the requirements [of GSWDRR §§ 23502, 23504, 23505, 23506, and 23507, 23508, and 23509] and is as protective of human health and the environment as that approved in the permit application, and is approved by the Administrator as a minor modification under GSWDRR § 23104(h). Any modification to the Ground Water Monitoring Plan and the Ground Water Monitoring Quality Assurance/Quality Control Plan shall be noted in the operating record.

IV.F. RECORD KEEPING AND REPORTING REQUIREMENTS

The Permittee shall comply with GSWDRR § 233012 and Book 4, Operations Plan, Section 8 for the record keeping and recording requirements.

<u>REPORTING:</u> The Permittee shall follow all reporting requirements specified in the approved Book 4 Landfill Operations Plan, Waste Exclusion Plan, and Groundwater Monitoring Plan. In addition, the Permittee shall **IMMEDIATELY** notify GUAM EPA in any of the following circumstances:

- Rejection of a waste load because it contains regulated hazardous waste, or PCB waste;
- 2. Discovery of regulated hazardous waste or PCB waste within the landfill;
- Occurrence of a fire in the landfill or appurtenant facilities;

- 4. Spill of a hazardous material; and
- 5. Failure of the leachate collection, treatment, or disposal system.

Emergency notification procedures shall be posted in a conspicuous location at all landfill facility buildings and entrance.

PART V. CLOSURE DESIGN AND CONSTRUCTION

V.A. GENERAL CLOSURE REQUIREMENTS

V.A.1. Closure Plan Notification

The Permittee must notify the Administrator that a notice of intent to close the unit has been placed in the operating record and that a closure plan has been prepared and placed in the operating record immediately or by the initial receipt of waste, whichever is later [GSWDRR §23601(d) and (e)] and Book 4, Closure and Post-Closure Plan, Section 5.7.

V.A.2. Performance Standard

The Permittee shall comply with GSWDRR § 23601 and 23602, Closure and Post-Closure Care and Book 4, Closure and Post-Closure Plan, for final closure or partial final closure and post-closure maintenance.

The Permittee shall retain a professional engineer registered in the Territory of Guam for the supervision of the closure construction, and upon completion, the engineer shall submit a summary report to the Agency as to the completion conformity to the plans and specifications as approved. This summary report shall include a documented control program of the closure cap construction, and the quality assurance/quality control testing procedures, laboratory analyses, and engineer's certification of construction

V.A.3. Amendment to Closure Plan

The Permittee must submit to the Administrator any proposed amendments to the Closure Plan for review and approval.

V.A.4. Notification of Closure

The Permittee shall notify the Administrator in writing at least 60 days prior to the date on which closure activities of any landfill cell, or final closure of the facility is to begin. The notification shall state that a notice of the intent to close the unit has been placed in the operating record, as required by Section 23601(e) and Book 4, Closure and Post-Closure Plan, Section 5.7.

V.A.5. Time Allowed For Closure

The Permittee shall comply with the closure schedule specified in GSWDRR § 23601(f) and Book 4, Closure and Post-Closure Plan, Section 5.7.

The Permittee must complete closure activities of each MSWLF unit in accordance with the Guam EPA approved Closure Plan within one-hundred eighty (180) days following the beginning of closure activities [GSWDRR § 23601(g)].

V.A.6. Certification of Closure

Following the closure of each MSWLF unit, the Permittee must notify the Administrator that a certification, signed by an independent registered professional engineer licensed in the Territory of Guam and approved by the Administrator, verifying that the closure has been completed in accordance with GSWDRR § 23601(e) and Book 4, Closure and Post-Closure Plan.

V.A.7. Title Recording

The Permittee shall submit a survey plat no later than the submission of certification of closure of each MSWLF unit, in accordance with SWMLC § 51113 and GSWDRR § 23601(i) and (j). The Permittee shall meet the requirements by recording with the Department of Land Management as part of the record of title that the property has been used as a landfill. The recording shall include waste locations and waste types disposed.

VI.A.8. Closure Cost Revision

An annual revision of closure costs for inflation and financial assurance funding as required by GSWDRR § 23704(a)(2) shall be submitted to the Administrator as part of the Annual Operating Report. The Permittee shall submit a complete revision of the closure and post-closure cost estimates any time the facility is expanded, a new cell is constructed, or a cell is expanded.

PART VI. POST-CLOSURE CARE AND MAINTENANCE

VI.A. GENERAL POST-CLOSURE CARE REQUIREMENTS

VI.A.1. Post-Closure Care Period

The Permittee shall begin post-closure care for each MSWLF unit after completion of closure of the unit and continue for 30 years after that date. Post-closure care shall be in accordance with GSWDRR § 23602 and Book 4, Closure and Post-Closure Plan, Section 6.2.

VI.A.2. Post-Closure Care Cost Revision

An annual revision of post-closure care costs for inflation and financial assurance funding as required by GSWDRR § 23703, shall be submitted to the Administrator as part of the annual report. The Permittee shall submit a complete revision of the closure and post-closure cost estimates any time the facility is expanded, any time a new cell is constructed, or any time a cell is expanded.

PART VII. SPECIAL CONDITIONS

The following terms and conditions were developed in response to Guam EPA's review of the MSWLF Permit Application and comments received during the public hearing process [GSWDRR § 23104(b)(6)(b)].

VII.A. PROVISIONS RELATED TO THE TRANSPORTATION OF MUNICIPAL SOLID WASTES TO THE LANDFILL:

VII.A.1. Special Condition I

1. Ownership of Waste Materials.

Solid wastes subject to collection by a collection service operator shall become the property of the collection service operator subject to local ordinances or contract conditions after such time as the authorized collector takes position of the wastes.

2. Equipment Construction.

All equipment used for collection and/or transportation of solid wastes shall be durable, easily cleanable and designed for safe handling, and constructed to prevent loss of wastes from the equipment during collection or transportation. If such equipment is used to collect or transport garbage, other wet or liquid producing wastes, or wastes composed of fine particles, such equipment in all cases shall be leak resistance. All equipment shall be maintained in good condition and cleaned in a frequency and in a manner so as to prevent the propagation or attraction of flies, rodents or other vectors and the creation of nuisances.

3. Equipment Safety.

Vehicles and equipment used in the transportation of garbage and rubbish shall be constructed and maintained in such a manner as to minimize the health and safety hazards to collection personnel and the public.

4. Equipment Parking.

A refuse collection service operator must designate an off-street location where all collection vehicles will be parked when not in service, except in emergency.

5. Identification of Operator.

Each vehicle used for the collection and transport of refuse shall be clearly marked with the name of the agency, company, or firm operating the vehicle.

6. Inspection of Equipment.

Equipment used for solid waste collection shall be made available for inspection as requested by the appropriate Enforcement Agency.

VII.B. PROVISIONS RELATED TO TRANSFER STATIONS FOR MUNICIPAL SOLID WASTES:

VII.B.1. Special Condition II

- The Permittee shall obtain a permit to operate transfer stations that meets Guam's regulatory agencies requirements to include but not limited to the following.
 - a. Site Map
 - b. Proof of Ownership
 - c. Meets local zoning requirements
 - d. Storm Water Discharge Requirements
 - e. Operators Certification
 - f. Scale
 - g. Site Design Plan
 - h. Site Operating Plan
 - i. Emergency Response and Remedial Action Plan
 - j. Proof of Financial Assurance and Closure Cost Estimate

2. Authorized Wastes

- a. Residential or Household Municipal Solid Waste
- b. Commercial Municipal Solid Waste
- 3. Prohibited Wastes (to include but not limited to the following)
 - a. Regulated Hazardous Waste
 - b. Polychlorinated Biphenyls (PCBs) Wastes
 - c. Industrial Wastes
 - d. Construction & Demolition Debris (with the exception of treated wood)
 - e. Contaminated Soils (i.e. Petroleum)
 - f. Corrosives & Acids
 - a. Paints
 - h. Solvents
 - i. Oilv Wastes
 - j. Explosives
 - k. Radioactive Wastes
 - E-wastes
 - m. Green Wastes
 - n. Appliances
 - o. Batteries (lead, cadmium, Lithium, etc.)
 - p. Do-it-Yourself (DIY) used motor oil
 - q. Used-oil filters from internal combustion engines
 - r. Junk Vehicles

VII.C. PROVISIONS RELATED TO REQUIREMENTS PRIOR TO LANDFILL RECEIPT OF SOLID WASTES:

VII.C.1. Special Condition III

- a. The Permittee shall submit an accurate and complete updated Site Specific Water Quality Monitoring Plan (SSWQMP) to include the results of the Baseline Monitoring Program (DMP) at least 120 days prior to the receipt of waste at the landfill, unless an alternate timeline is agreed to, in writing, by Guam EPA. The updated SSWQMP shall be certified as describe under VII.C.1.b. below. The final DMP must be approved prior to placement of waste within the landfill.
- b. All final documents submitted to Guarn EPA in compliance with this permit prior or following commencement of operation must comply with the Guam Professional Engineers, Architects, and Land Surveyors (PEALS) law and must be dated, signed, and sealed by the responsible licensed professional.
- c. The operator shall participate in meetings with Guam EPA and the community to discuss potential benefits to host community and implement agreed to benefits.

PART VIII. COMPLIANCE SCHEDULES

To be determined.