



GUAM ENVIRONMENTAL PROTECTION AGENCY

AHENSIAN PRUTEKSION LINA'LA GUAHAN

FELIX P. CAMACHO
GOVERNOR OF GUAM

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MICHAEL W. CRUZ
LT. GOVERNOR OF GUAM

Mr. David L. Manning
Receiver Representative
Gershman, Brickner, & Bratton, Inc.
542 North Marine Corps Drive
Tamuning, Guam 96913
Attention: Christopher Lund, Vice President

NOV 23 2009

RE: Notice of Decision to Issue, Solid Waste Management Facility Permit Application for the Layon Municipal Solid Waste Landfill, Located on Lot Number B-3-REM-2, Dandan Road, Malojloj, Inarajan

Dear Mr. Manning:

The Guam Environmental Protection Agency has completed its review of the information submitted to date in support of your application for a permit to operate a Municipal Solid Waste Landfill (MSWLF) on Lot Number B-3-REM-2, Dandan Road, Malojloj, Inarajan. We have also completed our review of the comments received during the public comment period.

As a result of our review, we have determined that the application materials submitted comply with the requirements of the law and regulations. Therefore, the Agency is hereby approving your application for a permit to construct a Municipal Solid Waste Landfill on the aforementioned location. Operation of the facility is contingent upon the successful completion of the conditions set forth in the permits.

Enclosed are the permits and conditions that the Agency is imposing as part of the permit approval. This Agency recommends that the Permittee thoroughly review the enclosed permit, conditions, and compliance schedule.

Failure to comply with the enclosed permits, conditions, and compliance schedule may result in the suspension or revocation of the MSWLF permit and issuance of a Notice of Violation and Order of Compliance. Should you have any question(s), please feel free to contact Ms. Conchita SN Taitano or Vincent J. Pereira at (671) 475-158/9.

Sincerely,


LORILEE T. CRISOSTOMO
Administrator

Enclosures:

cc: Ms. Alicia Limtiaco, Attorney General of Guam
Ms. Karen Ueno, USEPA Region 9,
Mr. Michael Wolfram, USEPA Region 9, Guam's Program Manager

"ALL LIVING THINGS OF THE EARTH ARE ONE"

**GUAM ENVIRONMENTAL PROTECTION AGENCY
MUNICIPAL SOLID WASTE LANDFILL FACILITY
PERMIT NO. 09-015 MSWLF**

Revision 22-Nov-09

FACILITY AND PHYSICAL LOCATION:

LAYON MUNICIPAL SOLID WASTE LANDFILL
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 LANDOWNER:

GOVERNMENT OF GUAM
DEPARTMENT OF PUBLIC WORKS
SOLID WASTE MANAGEMENT DIVISION
542 NORTH MARINE CORPS DRIVE
TAMUNING, GUAM 96913

NAME AND MAILING ADDRESS OF APPLICANT:

GERSHMAN, BRICKNER & BRATTON, INC.
COURT APPOINTED RECEIVER OF
GOVERNMENT OF GUAM
DEPARTMENT OF PUBLIC WORKS
SOLID WASTE MANAGEMENT DIVISION
542 NORTH MARINE CORPS DRIVE
TAMUNING, GUAM 96913

NAME AND MAILING ADDRESS OF OPERATOR:

GERSHMAN, BRICKNER & BRATTON, INC.
COURT APPOINTED RECEIVER OF
GOVERNMENT OF GUAM
DEPARTMENT OF PUBLIC WORKS
SOLID WASTE MANAGEMENT DIVISION
542 NORTH MARINE CORPS DRIVE
TAMUNING, GUAM 96913

CONTACT NOS.:

Facility Phone No.: N/A
Operator Phone No.: 671-646-3215
Owner Phone No.: 671-646-3215


LORILEE T. CRISOSTOMO
ADMINISTRATOR

NOV 23 2009

DATE

NOV 24 2014

EXPIRATION DATE

**GUAM ENVIRONMENTAL PROTECTION AGENCY
MUNICIPAL SOLID WASTE LANDFILL FACILITY
PERMIT NO. 09-015 MSWLF**

SPECIFICATIONS:

PERMITTED ACTIVITIES: Construction, operation, closure, and post-closure care of Layon Municipal Sanitary Landfill Phase I (Cells 1 and 2)

KEY DESIGN PARAMETERS:

<u>Permitted Area (in acres):</u> (Table 1 – Appendix F, Book 2)	11.07 acres (Cell 1)
Total Landfill Footprint Area	11.33 acres (Cell 2)
	127.4 acres (Cell 1 – Cell 11)
<u>Design Capacity (Net Refuse Airspace):</u> (Table 2 – Appendix F, Book 2)	360,109 yards ³ (Cell 1)
Total Landfill Footprint Capacity	1,047,064 yards ³ (Cell 2)
	15,808,794 yard ³ (Cell 1 – Cell 11)
<u>Cells Final Grade:</u>	
Maximum Elevation (Ft.MSL):	460 Feet above MSL
<u>Cells Base Grade:</u>	
Maximum Depth: (Ft. MSL):	305 Feet MSL
<u>Floor Liner System:</u> (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 low permeability soil (max. 1.0 X10 ⁻⁶ cm/sec)	
12 inches compacted native soil	
Geocomposite subdrain layer	
Prepared subgrade above subdrain system	
<u>Subdrain System:</u>	290 Feet MSL

EXECUTIVE SUMMARY

In the United States Territory of Guam, a civilian community of approximately 150,000 is currently disposing its solid waste at the municipal solid waste dump commonly referred to as the Ordot Dump located in the Municipality of Ordot-Chalan Pago. It is not known precisely when the Ordot Dump started being used as a waste deposit area but it has been routinely used as a waste deposit area since the late 1940s. As with all such dumps, the Ordot Dump does not meet current design requirements of the United States Environmental Protection Agency (USEPA). Because the Ordot Dump is obsolete and does not meet current environmental standards, the Government of Guam, Department of Public Works (DPW), is under a Consent Decree from USEPA to correct a number of operational deficiencies at the Ordot Dump and to eventually close the facility.

The Ordot Dump has a long history of operational and environmental problems, in 1986 USEPA issued an administrative order under the Clean Water Act (CWA), 33 U.S.C. §§ 1251-1387, to DPW, Guam. The order directed DPW to cease discharges of leachate from the Ordot Dump by May 1, 1987, but DPW failed to comply with this order.

A study by a consulting firm in 1994 indicates that the civilian population of Guam generates an average of 82,306 tons of solid waste per year. When the draft environmental impact statement study was initiated in 1995, the Ordot Dump was nearing capacity. It has since exceeded its anticipated capacity. In addition, Typhoon Paka wrought major destruction on the island in December 1997 and created a huge volume of MSW, much of which was disposed of at Ordot, further taxing the overburdened facility that increased the urgency for a new landfill site to be identified.

After years of inaction and noncompliance with the administrative orders, the United States initiated a suit on August 7, 2002, when it filed a Complaint asserting claims under CWA with the intention to force the closure of the Ordot Dump and initiate the opening of a new Municipal Solid Waste Landfill (MSWLF) that complied with all federal and local environmental laws and regulations. This suit asked the court to issue an order requiring the Government of Guam's DPW to take any measure needed to eliminate the un-permitted discharges. The Complaint sought both injunctive relief and civil penalties well above \$50 million.

In December 2003, the Consent Decree was submitted to the District Court of Guam. Following the publication in the Federal Register and period for public comment, Judge John S. Unpingco approved and entered the Consent Decree (Docket Number 55) on February 11, 2004. This Consent Decree established schedules for the closure of the Ordot Dump, the site selection for the new MSWLF, the construction of a new MSWLF, and commencement of operations of the new MSWLF. The Consent Decree required the Government of Guam's DPW to meet these schedules but DPW failed to meet the requirements of the Consent Decree.

The Government of Guam prepared and then published, in March 2004, its Preliminary Landfill Site Suitability Report explaining its justification of and methodology used in the selection of the three (3) candidate sites for the new Guam MSWLF. A screening project team comprising of DPW and Guam EPA, with mapping assistance from the Water and Environmental Research Institute (WERI), screened the sites. The Consent Decree mandated the selection of a minimum of three (3) sites within 30 days of the signing (February 11, 2004), reducing the time for public participation in the process. Of these three (3) sites, Guatali and Malaa were eliminated from further consideration because it does not meet the Resource Conservation and Recovery Act (RCRA) Subtitle D requirement for landfill siting. On January 31, 2005, Government of Guam selected Dandan, specifically Layon, based on the Preliminary Site Selection Report as Guam's MSWLF. USEPA accepted the selection of Dandan as the preferred site in a letter dated February 14, 2005.

Layon is located in the higher scarcely vegetated areas on the west side of the Dandan parcel, southwest of the former National Aeronautical and Space Administration (NASA) tracking station. The Dandan parcel (Lot B-3-REM) in which the Layon footprint is located is approximately 2,800 acres of undeveloped, privately-owned land. The existing land use on the 127-acre Layon footprint is a mixture of agricultural and recreational. The Layon footprint contains five (5) vegetation communities – savannah, grassland, ravine forest, disturbed vegetation/badlands, and wetlands. No threatened or endangered species were observed during the surveys although wetlands at the site may provide habitat for the endangered Mariana common moorhen. No formal archaeological sites were identified during the survey.

Design and landfill operating features for the Layon landfill will be in compliance with RCRA and the Rules and Regulations for Guam's Solid Waste Disposal, 10 Guam Code Annotated, Chapter 23, Title 22, Division 4. The landfill will also require compliance with other applicable local and federal laws and regulations.

**GUAM ENVIRONMENTAL PROTECTION AGENCY
MUNICIPAL SOLID WASTE LANDFILL FACILITY
PERMIT NO. 09-015 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 Code 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 documentations 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 to 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.
- Book 5** Guam Solid Waste Municipal Landfill Permit, dated December 23, 2008, amended May 22, 2009, amended July 23, 2009, amended August 5, 2009.

PART II - GENERAL PERMIT CONDITIONS

II.A. GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the Permittee and enforceable in accordance with the provisions of 10 Guam Code Annotated (GCA), Chapter 51, Solid Waste Management and Litter Control (SWMLC), as amended, Public Law 23-64, Guam Solid Waste Disposal Rules and Regulations (GSWDRR), and 22 Guam Administrative Rules, Chapter 23. The Agency will review the permit periodically and retains the right to initiate enforcement action for 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.1. Effect of Permit

- a. The Permittee is allowed to dispose solid waste within the permitted area in accordance with the conditions of this permit. Any disposal of solid waste not authorized in this permit is prohibited. Subject to the 10 GCA, SWMLC, §51104(a), compliance with this permit generally constitutes compliance, for the purposes of enforcement, 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 constitute a defense to any order issued or any action brought under 10 GCA, Chapter 51, SWMLC and Section 7003 of Resource Conservation and Recovery Act (RCRA); or any other law providing for protection of public health or the environment.
- d. Issuance of this permit does not provide approval of other applicable permit

requirements of 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 applied for and indicated 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 defined 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 defined 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 Department of Public Works (DPW), or its designee, including the contractor(s) who operate(s) the Layon Landfill on behalf of the Department of Public Works.

II.A.6. Duty to Comply

The Permittee shall comply with all conditions of this Permit, except to the extent and for the duration the Administrator has issued prior authorization for such noncompliance. Any Permit noncompliance, other than noncompliance which has received prior authorization from the Administrator, constitutes a violation of the SWMLC and the GSWDRR and is grounds for enforcement action; for Permit termination, revocation, suspension, or modification; or for denial of a Permit renewal application.

If, for any reasons, 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) hours 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 shall be effective for a period of **five (5) years** following the date of issuance. If a timely renewal application is made and the permit renewal is not complete by the expiration date, this permit will continue to be enforced until renewal is completed 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 in order 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 and shall carry out such measures, as 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 facility, 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 regulation.

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.
 - i. to determine whether cause exists for modifying, revoking and 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 his/her designee, upon the presentation of credentials or other documents as may be 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 to any records that must be kept under the condition of the permit or regulations;
- b. 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 assure 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;
 - b. 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 give notice to the Administrator, immediately, 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(l)].

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 is required to notify the Agency, whenever there are incidents such as fire, explosion, or release of regulated substance/waste, which could threaten human health or the environment (i.e. air, soil, surface and subsurface waters). Initial notification shall be made immediately by phone to the local Fire Department by calling 911 (Emergency Call Center). The **Incident Report** shall be submitted within three (3) days and shall 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 the facility remains under the control of the Receivership; and after the Receivership, the public official designated pursuant to GSWDRR §23104(b)(3).
2. 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
Post Office Box 22439 GMF
Barrigada, Guam 96921

Or delivered to:

Administrator
Guam Environmental Protection Agency
Building 17-3304, Mariner Ave.
Tiyán, 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 and that this document and its attachments were prepared either by me personally or under direction or supervision in a manner designed to ensure that qualified and knowledgeable personnel properly gathered and presented the information contained therein. I further certify, based on my personal knowledge or on my inquiry of those individuals immediately responsible for obtaining the information, that the information is true, accurate, and complete. I am aware 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 in Book 4, Section 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);
- d. 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;
- i. Detection Monitoring Program (Groundwater Monitoring) shall be conducted and submitted semi-annually in accordance with § 23505

- GSWDRR;
- j. 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;
- c. Quantities of semi-solid liquid waste (ton) received and how it is handled or disposed;
- d. Quantities of leachate (gallon) generated and how it was handled or disposed;
- e. Proposed refuse placement for 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 set aside for closure and post closure. 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

1. 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 methods of manufacture, they shall be made available for inspection by the public [5 GCA, Chapter 10, Freedom of Information].

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

The Permittee shall maintain at the facility and at the Department of Public Works, Division of Solid Waste, until 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 and all amendments, revisions and modifications to these documents:

1. 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.
5. 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).
8. 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).

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 GSWDRR § 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 construction of the modification or change. All plans must be updated to incorporate 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 Cell 1 & Cell 2 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

- a. 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 shall be kept onsite and readily available at the landfill, and shall be kept up to date with all revisions as approved by Guam EPA. The landfill shall be operated in accordance with the Operations Plan as included in the permit application. If necessary, the facility owner may modify the Operations Plan, provided that the modification meets all of the requirements of GSWDRR § 23104(h), 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 Operations Plan shall be noted 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 compliance 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, 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) and Guam Hazardous Waste Management Regulation (GHWMR) [40 CFR 260.10 [40 CFR Part 261.3]] or Polychlorinated biphenyls (PCB's) 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 to include but are not limited to the following: junk vehicles, appliances, construction & demolition debris, PCB wastes, contaminated soils (petroleum), E-wastes, DIY used motor oil, batteries, radioactive wastes, solvents,

paints, oily wastes, acids, corrosives, green wastes, industrial wastes, explosives, asbestos, sludge, and asbestos containing materials, 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 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 the provisions in Book 4, Operations Plan, Appendix B which provide instructions for the acceptance and disposal of the following special wastes:

- a. **Infectious Wastes.** Infectious waste may not 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 5.5.3 and 22 GAR, Chapter 20. 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 may not be disposed** in the landfill without the prior

and written approval of the Administrator, provided such disposal is in accordance with 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, Operations Plan, Appendix C.

- e. The burial locations of all special wastes shall be recorded and reported in accordance with the record keeping and reporting requirements specified 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 shall be completely covered at the end of each working day with a minimum of six inches of earthen material. Aggregate size shall be less than 2.5 inches and well-graded. In addition, the earthen material shall be indigenous to Guam and free of any contamination from hazardous constituents, substances, and/or wastes.

Request for the use of an Alternative Daily Cover (ADC) as cover shall be submitted to Guam EPA. The request shall evaluate the proposed ADC to its specific characteristics and appropriate use at the facility. The Agency requires demonstration periods in six (6) months increment to show that the ADC and its thickness can control disease vectors, fires, odors, nuisance, litter [GSWDRR § 23305, 23306, and 23307], and scavenging without presenting a threat to human health and the environment. The Permittee shall obtain Agency approval prior to the commencement of the demonstration project. The use of ADC is limited to daily cover increment period; the Permittee shall report the performance of the ADC as to its specific characteristics and appropriate use at the facility. The demonstration period or the approval use of an ADC may be rescinded or cancelled by either the Agency or 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 workplace, 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 provide measures to minimize free litter in the landfill and prevent its occurrence beyond the property line of the facility. During the course of the working day of operation, all windblown material shall be collected and be properly disposed. The measures, at a minimum, shall 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 shall provide measures for minimizing the tracking of mud onto public roads, and the generation of dust from vehicular traffic on-site. The measures shall include on-site road maintenance and cleaning, a wet-weathered disposal area, and a truck wheel cleaning area for vehicles prior to leaving the site. Possible truck or truck wheel cleaning measures that may be implemented include: rumble strip, drive-through tire wash, trash clean out pad, and/or wash pad.

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/Burning of Waste

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.

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.

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 **less than 400 tons per day** 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 **greater than 400 tons per day** 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 Guam 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:
 - i. 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]

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 Non-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
- 3) 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 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.

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.

REPORTING: 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:

1. 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;
3. 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.

V.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 possession 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

1. 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
 - e. Contaminated Soils (i.e. Petroleum)
 - f. Corrosives & Acids
 - g. Paints
 - h. Solvents
 - i. Oily Wastes
 - j. Asbestos
 - k. Explosives
 - l. Radioactive Wastes
 - m. E-wastes
 - n. Asbestos Containing Materials
 - o. Green Wastes
 - p. Appliances
 - q. Batteries (lead, cadmium, Lithium, etc.)
 - r. Do-it-Yourself (DIY) used motor oil

- s. Used-oil filters from internal combustion engines
- t. 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 (BMP) and the proposed Detection Monitoring Program (DMP) at least 120 days prior to the receipt of waste at the landfill, unless Guam EPA agrees to, an alternate timeline in writing. The updated SSWQMP shall be certified as describe under VII.C.1.b. The final DMP must be approved prior to placement of waste within the landfill.
- b. All final documents submitted to Guam EPA in compliance with this permit prior to 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.



SOLID WASTE
MANAGEMENT
CONSULTANTS
RECEIVER

November 18, 2009

Dr. Leonard Olive, Sc.D.
General Manager
Guam Waterworks Authority
578 North Marine Corps Drive
Tamuning, Guam 96913

Dear Dr. Leonard:

Thank you for your letter of November 18, 2009. We appreciate GWA's willingness to work with us in a productive manner on the leachate treatment for the Layon Landfill.

In your letter you state that "GBB will" and then state a number of permit conditions. As a point of clarification, it should be noted that the permit conditions you seek are from the Government of Guam, not GBB. Your records and the records of Guam EPA should clearly reflect that when you refer to GBB, it is in its capacity as Receiver for the Solid Waste Management Division. In these matters, GBB is acting on behalf of the Government of Guam pursuant to Orders of the District Court of Guam.

We accept the conditions as they relate to leachate treatment. Permit conditions 2 and 4 are unrelated to leachate treatment and appear to be inconsistent with the Consent Decree and Orders of the District Court and/or the intended plan of operations at the Layon Landfill. We will discuss these issues with the Court at the next Status Hearing and seek guidance as to the extent we may comply with them.

We look forward to continuing our work together to achieve compliance with the Consent Decree and address this long-standing environmental problem for Guam.

Sincerely,

David L. Manning
Receiver Representative

C.c. Ms. Lorrilee Crisostomo, Administrator
Guam Environmental Protection Agency

Mr. Tom Keeler, Office of the Attorney General

Mr. Harvey Gershman, President GBB

Government of Guam
Department of Public Works, Solid Waste Management Division
542 North Marine Corps Drive, Tamuning, Guam 96913
Phone: (671) 646-4379, Ext. 201 or 212
www.GuamSolidWasteReceiver.org
www.gbbinc.com



GUAM WATERWORKS AUTHORITY
ATURIDAT KINALAMTEN HANOM GUAHAN
578 North Marine Corps Drive, Tamuning, GU 96913
Phone: (671) 647-7681 Fax: (671) 646-2335

November 18, 2009

VIA HAND DELIVERY

David Manning
GBB's Receiver Representative
Guam Department of Public Works,
Solid Waste Management Division
542 North Marine Corps Drive,
Tamuning, Guam 96913

RE: GWA's Permit Requirements For Layon Landfill.

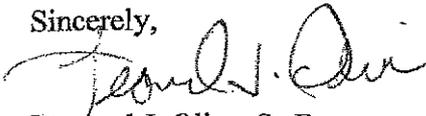
Dear Mr. Manning,

The following are the permit conditions from the GWA Guam Waterworks Authority:

1. GBB will credit biosolid and other disposal costs incurred by GWA, including those currently outstanding, against future leachate disposal costs and not deny GWA the opportunity to dispose of its biosolids at the Ordot or Layon facility.
2. From this day forward, GBB will charge GWA for biosolids disposal on a dry weight basis until the biosolids can be reused in which case, GBB shall pay GWA a fair price for the use of GWA's biosolids as cover for the landfill or at the Ordot dump.
3. GBB will review their cost basis for GWA's biosolids disposal.
4. GBB agrees to participate and assist GWA in every way possible to ensure that GWA's biosolids can be reused in accordance with applicable environmental regulations for uses such as farming, landfill topsoil and compost. GBB's assistance shall include, but not be limited to, working with regulators to accept viable choices, assisting with negotiations with private contractors, providing materials such as green waste or food waste to mix with compost.
5. GBB will pay leachate disposal rates set by the Guam Public Utilities Commission.

6. The leachate is to be treated by GWA at its Inarajan WWTP in accordance with GWA's Rules and Regulations, applicable environmental laws and as presented in the Final Layon Landfill Leachate Treatment Feasibility Study (as amended), including GWA's comments thereto (see attached).
7. GBB will fund all improvements to the landfill and the associated infrastructure to allow the leachate to be treated at GWA's Inarajan WWTP. GBB will further fund all improvements or alternative treatment methods which may be necessary to treat the leachate if necessary to allow GWA to provide proper treatment.
8. GBB shall fund all improvements to GWA's Ugum Water Treatment Facility if the operation of the landfill (regardless of cause) requires GWA to implement alternative treatment practices.

Sincerely,



Leonard J. Olive, Sc.D.
GWA General Manager



GUAM ENVIRONMENTAL PROTECTION AGENCY

AHENSIAN PRUTEKSION LINA'LA GUAHAN

FELIX P. CAMACHO
GOVERNOR OF GUAM

P.O. Box 22439 GMF • BARRIGADA, GUAM 96921
TEL: 475-1658/9 • FAX: 477-9402

MICHAEL W. CRUZ
LT. GOVERNOR OF GUAM

TITLE V PERMIT TO OPERATE

Permit Number: **FO-020**
Issue Date: **November 23, 2009**
Expiration Date: **November 24, 2014**

In accordance with the provisions of Title V of the Clean Air Act (CAA) and the Guam Air Pollution Control Standards and Regulations (GAPCSR), Public Law 24-322, and the Guam Air Pollution Control Act (GAPCA), Public Law 24-20, 10 Guam Code Annotated (GCA), Chapter 49, and the Consent Decree (U.S. District Court Territory of Guam Civil Case No. 02-00022 and subsequent Orders), the following facility described below:

Layon Municipal Sanitary Landfill
Lot No. B-3REM-2
Inarajan, Guam

is authorized to operate air emission units and to conduct other air pollutant emitting activities in accordance with the permit conditions listed in this permit. Terms and conditions not otherwise defined in this permit have the meaning assigned to them in the referenced regulations. All terms and conditions of the permit are enforceable by Guam Environmental Protection Agency (GEPA), the United States Environmental Protection Agency (USEPA) and citizens under the CAA. The issuance of this permit is based on the plans, specifications, and additional information submitted as part of the application dated October 22, 2008.

If all proposed control measures and/or equipment are not installed and properly operated and maintained, this will be considered a violation of the permit.

Acceptance of this permit constitutes an agreement and acknowledgement that the holder will comply with all the rules and regulations of GEPA and these permit conditions.

This permit, (a) does not in any manner affect the title of the premises upon which the equipment is located, (b) does not release the permittee from any liability for any loss due to personal injury or property damage caused by, resulting from or arising out of the design, installation, maintenance, or operation of the equipment, and (c) in no manner implies or suggests that GEPA, or its officers, agents, or employees assumes any liability, directly or indirectly, for any loss due to personal injury or property damage caused by, resulting from or arising out of the design, installation, maintenance, or operation of the equipment.

"ALL LIVING THINGS OF THE EARTH ARE ONE"

Guam EPA

Title V Federal Operating Permit

Layon Municipal Solid Waste Landfill, Inarajan, Guam

Permit No. FO-005

This permit is valid for a period of five (5) years and shall expire at midnight on the date specified above unless a timely and complete renewal application has been submitted at least 6 months but not more than 18 months prior to the date of expiration. The permit number cited above should be referenced in future correspondence regarding this facility.

NOV 23 2009

Date



Lorilee T. Crisostomo, Administrator
Guam EPA

Guam EPA

Title V Federal Operating Permit

Layon Municipal Solid Waste Landfill, Inarajan, Guam

Permit No. FO-005

Abbreviations and Acronyms

CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CFR	Code of Federal Regulations
GAPCSR	Guam Air Pollution Control Standards and Regulations
GCA	Guam Code Annotated
GEPA	Guam Environmental Protection Agency
NAAQS	National Ambient Air Quality Standard
NMOC	Non-Methane Organic Compounds
NESHAP	National Emission Standards for Hazardous Air Pollutants
NSPS	New Source Performance Standards
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SSM	Startup, Shutdown, and Malfunction
USEPA	United States Environmental Protection Agency

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Guam EPA

Title V Federal Operating Permit

Layon Municipal Solid Waste Landfill, Inarajan, Guam

Permit No. FO-005

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Guam EPA

Title V Federal Operating Permit
Layon Municipal Solid Waste Landfill, Inarajan, Guam
Permit No. FO-005

I. Source Identification

Facility Name: Layon Municipal Solid Waste Landfill
Facility Location: Layon area of Dandan, Lot No. B-3REM-2
City: Inarajan
Territory: Guam
USEPA Region: 9
SIC Code: 4953

Responsible Official: Christopher A. Lund
Gershman, Brickner, & Bratton, Inc. (GBB)
Receiver for the Court
Phone Number: (671) 646-3249

Facility Manager/Contact: Christopher A. Lund
Phone Number: (671) 646-3249

Person Responsible for Recordkeeping: Christopher A. Lund
Phone Number: (671) 646-3249

Description of Process:

Layon Municipal Solid Waste Landfill is a landfill accepting municipal solid waste. The sources of emissions are the generation of gas by the landfill and combustion emissions from a flare which will be used to destroy VOCs in captured landfill gas.

II. Requirements for Specific Emission Units

II.A. Equipment Description

II.A.1 This permit encompasses the following equipment and associated appurtenances that are considered significant sources of emissions. [GAPCSR, Section 1104.12(12)]

Emission Unit ID	Description	Associated Control Equipment
FL-1	Landfill Gas Flare	n/a
LF-1	Landfill Gas Surface Emissions	FL-1

II.A.2 The permittee shall have installed an identification tag or nameplate on each piece of equipment that identifies the model number, serial number, and manufacturer. The identification tag or nameplate shall be permanently attached to the equipment at a conspicuous location. [Section 49107(7)(B) of Chapter 49, Part 2, Division 2, Part 1 of Title 10 of the GCA]

II.B. Standards for Air Emissions

II.B.1 The permittee shall operate a landfill gas collection system that meets the following requirements [40 CFR §60.752(b)(2)(ii), 40 CFR §60.753(a), 40 CFR §60.755(a)(6)]:

- a. the system is designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas collection system;
- b. landfill gas is collected from each area, cell, or group of cells in the landfill in which the initial solid waste has been placed for a period of five years or more, or two years or more if the landfill is closed or at final grade;
- c. gas is collected at a sufficient extraction rate; and
- d. the system is designed to minimize off-site migration of subsurface gas.

II.B.2 The Permittee shall operate the collection and control device installed in accordance with the provisions of 40 CFR §60.753, 40 CFR §60.755 and 40 CFR §60.756. [40 CFR §60.752(b)(2)(iv)]

Guam EPA

Title V Federal Operating Permit

Layon Municipal Solid Waste Landfill, Inarajan, Guam

Permit No. FO-005

II.B.3 The permittee shall design the landfill gas collection system to achieve a capture efficiency of 90% of all landfill gas generated at the site. [GAPCSR Section 1104.12(1)]

II.B.4 The permittee shall route all collected landfill gas to an open flare designed and operated in accordance with 40 CFR §60.18 and 40 CFR §63.11. [40 CFR §60.752(b)(2)(iii), 40 CFR §60.18(c) through (f), 40 CFR §63.11(b)]

II.B.5 The particulate emissions from this unit shall not exceed 0.40 lb/MMBtu. [Guam State Implementation Plan (SIP), Section 7.5]

II.B.6 The permittee shall not cause or permit the continuous emission of visible air pollutants with a density equal to or darker than twenty (20) percent opacity from any emission unit nor the emission of visible air pollutants of a density darker than sixty (60) percent opacity for a period aggregating more than three (3) minutes in any sixty (60) minute period. [GAPCSR, Section 1103.3; SIP, Section 10.1]

II.C. Operational Standards for Collection and Control Systems

II.C.1 The Permittee shall operate the collection system with negative pressure at each wellhead except under the following conditions: [40 CFR §60.753(b)]

- a. A fire or increased well temperature. The Permittee shall record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports as provided in 40 CFR §60.757(f)(1);
- b. Use of a geomembrane or synthetic cover. The Permittee shall develop acceptable pressure limits in the design plan; or
- c. A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes shall be approved by USEPA and GEPA.

II.C.2 The Permittee shall operate each interior wellhead in the collection system with a landfill gas temperature less than 55°C and with either a nitrogen level less than 20 percent or an oxygen level less than 5 percent. The Permittee may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens. [40 CFR §60.753(c)]

II.C.3 The nitrogen level shall be determined using Method 3C. [40 CFR §60.753(c)(1)]

II.C.4 The oxygen level shall be determined by an oxygen meter using Method 3A except that:

Guam EPA

Title V Federal Operating Permit

Layon Municipal Solid Waste Landfill, Inarajan, Guam

Permit No. FO-005

- a. The span shall be set so that the regulatory limit is between 20 and 50 percent of the span;
- b. A data recorder is not required;
- c. Only two calibration gases are required, a zero and span, and ambient air may be used as the span; and
- d. A calibration error check is not required;
- e. The allowable sample bias, zero drift, and calibration drift are ± 10 percent. [40 CFR §60.753(c)(2)]

II.C.5 The Permittee shall operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill. To determine if this level is exceeded, the owner or operator shall conduct surface testing around the perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. The owner or operator may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan shall be developed that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30 meter intervals. Areas with steep slopes or other dangerous areas may be excluded from the surface testing. [40 CFR §60.753(d)]

II.C.6 The permittee shall operate the landfill gas collection system such that all collected gases are vented to a control system designed and operated in compliance with 40 CFR §60.752(b)(2)(iii). In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within 1 hour. [40 CFR §60.753(e)]

II.C.7 The permittee shall operate the landfill gas control or treatment system at all times when the collected gas is routed to the system. [40 CFR §60.753(f)]

II.C.8 If monitoring demonstrates that the operational requirements 40 CFR §60.753(b), (c), or (d) are not met, corrective action shall be taken as specified in 40 CFR §60.755(a)(3) through (5) or 40 CFR §60.755(c). If corrective actions are taken as specified in 40 CFR §60.755, the monitored exceedance is not a violation of the operational requirements in this section. [40 CFR §60.753(g)]

II.D. NSPS Compliance Provisions

II.D.1 The provisions of NSPS subpart WWW apply at all times, except during periods of startup, shutdown, or malfunction, provided that the duration of startup, shutdown, or malfunction shall not exceed 5 days for collection systems and shall not exceed 1 hour for treatment or control devices. [40 CFR §60.755(e)]

II.D.2 The following procedures shall be used for compliance with the surface methane operational standard as provided in 40 CFR §60.753(d). [40 CFR §60.755(c)]

- a. After installation of the collection system, the owner or operator shall monitor surface concentrations of methane along the entire perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals (or a site-specific established spacing) for each collection area on a quarterly basis using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in 40 CFR §60.753(d).
- b. The background concentration shall be determined by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells.
- c. Surface emission monitoring shall be performed in accordance with section 4.3.1 of USEPA Method 21, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions.
- d. Any reading of 500 parts per million or more above background at any location shall be recorded as a monitored exceedance and the actions specified below shall be taken. As long as each of the specified actions are taken, the exceedance is not a violation of the operational requirements of 40 CFR §60.753(d).
 - (1) The location of each monitored exceedance shall be marked and the location recorded.
 - (2) Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each exceedance shall be made and the location shall be re-monitored within 10 calendar days of detecting the exceedance.
 - (3) If the re-monitoring of the location shows a second exceedance, additional corrective action shall be taken and the location shall be monitored again within 10 days of the second exceedance. If the re-monitoring shows a third exceedance for the same location, the action specified in 40 CFR §60.755(c)(4)(v) shall be taken, and no

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further monitoring of that location is required until the action specified in 40 CFR §60.755(c)(4)(v) has been taken.

- (4) Any location that initially showed an exceedance but has a methane concentration less than 500 ppm methane above background at the 10-day re-monitoring specified in paragraph 40 CFR §60.755(c)(4)(ii) or (iii) shall be re-monitored 1 month from the initial exceedance. If the 1-month re-monitoring shows a concentration less than 500 parts per million above background, no further monitoring of that location is required until the next quarterly monitoring period. If the 1-month re-monitoring shows an exceedance, the actions specified in paragraph 40 CFR §60.755(c)(4)(iii) or (v) shall be taken.
- (5) For any location where monitored methane concentration equals or exceeds 500 parts per million above background three times within a quarterly period, a new well or other collection device shall be installed within 120 calendar days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes or control device, and a corresponding timeline for installation may be submitted to the Administrator for approval.

II.D.3 The Permittee shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis. [40 CFR §60.755(c)(5)]

II.D.4 In seeking to comply with the provisions in 40 CFR §60.755(c), the Permittee shall comply with the following instrumentation specifications and procedures for surface emission monitoring devices:

- a. The portable analyzer shall meet the instrument specifications provided in section 3 of Method 21 of appendix A of 40 CFR Part 60, except that “methane” shall replace all references to VOC.
- b. The calibration gas shall be methane, diluted to a nominal concentration of 500 parts per million in air.
- c. To meet the performance evaluation requirements in section 3.1.3 of Method 21 of appendix A of 40 CFR Part 60, the instrument evaluation procedures of section 4.4 of Method 21 of appendix A of 40 CFR Part 60 shall be used.
- d. The calibration procedures provided in section 4.2 of Method 21 of appendix A of 40 CFR Part 60 shall be followed immediately before commencing a surface monitoring survey. [40 CFR §60.755(d); 40 CFR §60.756(f)]

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II.E. Startup, Shutdown, and Malfunction Plan

II.E.1 The permittee shall have in place a written Startup, Shutdown, and Malfunction (SSM) plan according to the provisions in 40 CFR 63.6(e)(3). A copy of the SSM plan must be maintained on site. Failure to write, implement, or maintain a copy of the SSM plan is a deviation from the requirements 40 CFR 63, Subpart AAAA. [40 CFR §63.1960]

II.F. Monitoring and Testing Requirements

II.F.1 The permittee shall install a sampling port and a thermometer, other temperature measuring device, or an access port for temperature measurements at each wellhead, and:

- a. Measure and record the gauge pressure at each individual well on a monthly basis. If a positive pressure exists, action shall be initiated to correct the exceedance within 5 calendar days, except for the three conditions allowed under 40 CFR §60.753(b). If negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial measurement of positive pressure. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to USEPA and GEPA for approval. The Permittee is not required to expand the system during the first 180 days after gas collection system startup;
- b. Monitor and record the nitrogen or oxygen concentration in the landfill gas on a monthly basis as provided in 40 CFR §60.753(c). If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to USEPA and GEPA for approval; and
- c. Monitor and record the temperature of the landfill gas on a monthly basis. [40 CFR §60.756(a), §60.755(a)(3), §60.755(a)(5)]

II.F.2 In seeking to comply with 40 CFR §60.752(b)(2)(iii) using an open flare, the Permittee shall install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment:

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- a. A heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame.
- b. A device that records flow to or bypass of the flare. The Permittee shall either:
 - 1 Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or
 - 2 Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line. [40 CFR §60.756(c)]

II.F.3 The permittee shall include deviations specified in the Municipal Solid Waste Landfill NESHAP in the semiannual monitoring report required by Condition III.D.4 of this permit. Deviations for continuous emission monitors or numerical continuous parameter monitors must be determined using a 3-hour monitoring block average. Deviations include, but are not limited to the following [40 CFR §63.1955(c); 40 CFR §63.1965(a), (b), and (c)]:

- a. when 1 hour or more of the hours during the 3-hour block averaging period does not constitute a valid hour of data. A valid hour of data must have measured values for at least three 15-minute monitoring periods within the hour.
- b. when the Start-up, Shutdown, and Maintenance Plan is not developed, implemented, or maintained on site.

II.G. Recordkeeping Requirements

II.G.1 The permittee shall maintain for at least five years up-to-date, readily accessible, on-site records of the design capacity report which triggered 40 CFR §60.752(b), the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable. [40 CFR §60.758(a)]

II.G.2 The permittee shall maintain up-to-date, readily accessible records for the life of the control equipment of the following data as measured during the initial performance test or compliance determination:

- a. The maximum expected gas generation flow rate as calculated in 40 CFR §60.755(a)(1). The owner or operator may use another method to

determine the maximum gas generation flow rate, if the method has been approved by the Administrator.

- b. The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in 40 CFR §60.759(a)(1).

Records of this data from subsequent tests or monitoring shall be maintained for a minimum of five years. Records of the control device vendor specifications shall be maintained until removal of the control device. [40 CFR §60.758(b)(1)]

II.G.3 When seeking to demonstrate compliance with 40 CFR §60.752(b)(2)(iii)(A) through use of the open flare, the permittee shall maintain up-to-date, readily accessible records of the following:

- a. the flare type (i.e., steam-assisted, air-assisted, or nonassisted), all visible emission readings, heat content determination, flow rate or bypass flow rate measurements, and exit velocity determinations made during the performance test as specified in 40 CFR §60.18; and
- b. continuous records of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame of the flare flame is absent.

Records of this data from subsequent tests or monitoring shall be maintained for a minimum of five years. Records of the control device vendor specifications shall be maintained until removal of the control device. [40 CFR §60.758(b)(4); and 40 CFR §60.758(c)(4)]

II.G.4 The Permittee shall keep for 5 years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in 40 CFR §60.756. [40 CFR §60.758(c)]

II.G.5 The Permittee shall keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector. [40 CFR §60.758(d)]

- a. The Permittee shall keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors as specified under 40 CFR §60.755(b).
- b. The Permittee shall keep readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing or nondegradable waste excluded from collection as provided in 40 CFR §60.759(a)(3)(i) as

well as any nonproductive areas excluded from collection as provided in 40 CFR §60.759(a)(3)(ii).

II.G.6 The Permittee shall keep for at least 5 years up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in 40 CFR §60.753, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance. [40 CFR §60.758(e)]

II.H. Specifications for Active Collection Systems

II.H.1 The Permittee shall site active collection wells, horizontal collectors, surface collectors, or other extraction devices at a sufficient density throughout all gas producing areas using the following procedures unless alternative procedures have been approved by USEPA and Guam EPA as provided in 40 CFR §60.752(b)(2)(i)(C) and (D): [40 CFR §60.759(a)]

- a. The collection devices within the interior and along the perimeter areas shall be certified to achieve comprehensive control of surface gas emissions by a professional engineer. The following issues shall be addressed in the design: depths of refuse, refuse gas generation rates and flow characteristics, cover properties, gas system expandibility, leachate and condensate management, accessibility, compatibility with filling operations, integration with closure end use, air intrusion control, corrosion resistance, fill settlement, and resistance to the refuse decomposition heat.
- b. The sufficient density of gas collection devices determined in 40 CFR §60.759(a)(1) shall address landfill gas migration issues and augmentation of the collection system through the use of active or passive systems at the landfill perimeter or exterior.
- c. The placement of gas collection devices determined in 40 CFR §60.759(a)(1) shall control all gas producing areas, except as provided by the following:
 - 1 Any segregated area of asbestos or nondegradable material may be excluded from collection if documented as provided under 40 CFR §60.758(d). The documentation shall provide the nature, date of deposition, location and amount of asbestos or nondegradable material deposited in the area, and shall be provided to the Administrator upon request.
 - 2 Any nonproductive area of the landfill may be excluded from control, provided that the total of all excluded areas can be shown to contribute less than 1 percent of the total amount of NMOC emissions from the landfill. The amount, location, and age of the material shall be

documented and provided to the Administrator upon request. A separate NMOC emissions estimate shall be made for each section proposed for exclusion, and the sum of all such sections shall be compared to the NMOC emissions estimate for the entire landfill. Emissions from each section shall be computed using the following equation listed in 40 CFR §60.759(a)(3)(ii).

- 3 When applying the formula in 40 CFR §60.759(a)(3)(ii), the values for k and C_{NMOC} determined in field testing shall be used if field testing has been performed in determining the NMOC emission rate or the radii of influence (this distance from the well center to a point in the landfill where the pressure gradient applied by the blower or compressor approaches zero). If field testing has not been performed, the default values for k , L_0 and C_{NMOC} provided in 40 CFR §60.754(a)(1) or the alternative values from 40 CFR §60.754(a)(5) shall be used. The mass of nondegradable solid waste contained within the given section may be subtracted from the total mass of the section when estimating emissions provided the nature, location, age, and amount of the nondegradable material is documented as provided in 40 CFR §60.759(a)(3)(i).

II.H.2 The Permittee shall construct the gas collection devices using the following equipment or procedures: [40 CFR §60.759(b)]

- a. The landfill gas extraction components shall be constructed of polyvinyl chloride (PVC), high density polyethylene (HDPE) pipe, fiberglass, stainless steel, or other nonporous corrosion resistant material of suitable dimensions to: convey projected amounts of gases; withstand installation, static, and settlement forces; and withstand planned overburden or traffic loads. The collection system shall extend as necessary to comply with emission and migration standards. Collection devices such as wells and horizontal collectors shall be perforated to allow gas entry without head loss sufficient to impair performance across the intended extent of control. Perforations shall be situated with regard to the need to prevent excessive air infiltration.
- b. Vertical wells shall be placed so as not to endanger underlying liners and shall address the occurrence of water within the landfill. Holes and trenches constructed for piped wells and horizontal collectors shall be of sufficient cross-section so as to allow for their proper construction and completion including, for example, centering of pipes and placement of gravel backfill. Collection devices shall be designed so as not to allow indirect short circuiting of air into the cover or refuse into the collection system or gas into the air. Any gravel used around pipe perforations should be of a dimension so as not to penetrate or block perforations.

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

II.H.3 The Permittee shall convey the landfill gas to a control system in compliance with 40 CFR §60.752(b)(2)(iii) through the collection header pipe(s). The gas mover equipment shall be sized to handle the maximum gas generation flow rate expected over the intended use period of the gas moving equipment, calculated in accordance with 40 CFR §60.755(a)(1). [40 CFR §60.759(c)]

III. Facility-Wide or Generic Permit Requirements

Conditions in Section III of the permit apply to all emissions units located at the facility.

III.A. Work Practice and Operational Requirements

- III.A.1 All equipment, facilities, and systems installed or used to achieve compliance with terms and conditions of this permit shall at all times, including periods of startup, shutdown and malfunction, be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. The permittee shall conduct proper preventative maintenance procedures for the landfill gas flare in accordance with the manufacturer's recommendations. [GAPCSR, Section 1104.12(12)]
- III.A.2 Adequate control measures approved by GEPA shall be implemented to prevent exceedences of any applicable air quality standards during the operation of the facility. [GAPCSR, Section 1104.12(8)]
- III.A.3 The permittee shall not cause or permit visible fugitive dust to become airborne without taking reasonable precautions. Examples of reasonable precautions are [GAPCSR, Section 1103.4(a); SIP, Sections 8.1, 8.4, and 8.7]:
- a. Use of water or suitable chemicals for control of fugitive dust in the demolition of existing buildings or structures, construction and retrofitting operations, the grading of roads, or the clearing of land;
 - b. Application of asphalt, water, or suitable chemicals on roads, material stockpiles, and other surfaces which may allow release of fugitive dust;
 - c. Installation of appurtenances that provide an enclosure and ventilation for all crushing, aggregate screening, and conveying of material likely to become airborne;
 - d. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Reasonable containment methods shall be employed during sandblasting, spray painting, or other similar operations;
 - e. Covering all moving, open-bodied trucks transporting materials which may release fugitive dust;
 - f. Conducting agricultural operations, such as tilling of land and the application of fertilizers, in such manner as to reasonably minimize fugitive dust;

- g. Maintenance and sealing of road-ways and parking lots so as to prevent the exposure of such surfaces to wind, water, or vehicular travel erosion; and
- h. Prompt removal of earth or other materials from paved streets which have been transported there by trucking, earth-moving equipment, erosion, or other means.

III.A.4 Except for persons engaged in agricultural operations or persons who can demonstrate to the Administrator that the best practical operation or treatment is being implemented, no person shall cause or permit the discharge of visible fugitive dust beyond the property lot line on which the fugitive dust originates. [GAPCSR, Section 1103.4(b); SIP, Section 8.2]

III.B. Monitoring and Testing Requirements

In addition to the unit specific testing requirements derived from the applicable requirements for each individual unit contained in Section II.F of this permit, the permittee shall comply with the following generally applicable testing requirements as necessary to ensure that the required tests are sufficient for compliance purposes:

III.B.1 The permittee shall provide sampling and testing facilities at its own expense. The tests shall be conducted at the maximum expected operating capacity of the equipment at this facility and GEPA may monitor the tests. For performance test purposes, sampling ports, platforms and access shall be provided by the permittee on the landfill gas flare in accordance with 40 CFR 60.8 (e). [GAPCSR, Section 1102.4; SIP, Sections 3.6(a), 3.9, and 4.1]

III.B.2 At least thirty (30) days prior to a performance test, the permittee shall submit a written performance test plan to GEPA that describes the test date(s), duration, locations, and methods, source operation and other parameters that may affect test results. Such a plan shall conform to USEPA guidelines including quality assurance procedures. [GAPCSR, Section 1102.4]

III.B.3 Submit to USEPA a source test plan 45 days prior to any required testing. The source test plan shall include and address the following elements [40 CFR §71.6(a)(3)]:

- 1.0 Purpose of the test
- 2.0 Source Description and Mode of Operation During Test
- 3.0 Scope of Work Planned for Test
- 4.0 Schedule/Dates
- 5.0 Process Data to be Collected During Test
- 6.0 Sampling and Analysis Procedures
- 6.1 Sampling Locations

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- 6.2 Test Methods
- 6.3 Analysis Procedures and Laboratory Identification
- 7.0 Quality Assurance Plan
- 7.1 Calibration Procedures and Frequency
- 7.2 Sample Recovery and Field Documentation
- 7.3 Chain of Custody Procedures
- 7.4 QA/QC Project Flow Chart
- 8.0 Data Processing and Reporting
- 8.1 Description of Data Handling and QC Procedures
- 8.2 Report Content

III.B.4 Unless otherwise specified by an applicable requirement or permit condition in Section II, all source tests shall be performed at maximum operating rates (90% to 110%) of device design capacity. [40 CFR §71.6(a)(3)]

III.B.5 Compliance with the NMOC standard listed in Condition II.B.4 of this permit shall be determined in accordance with performance tests established by 40 CFR 60.8. [40 CFR §60.11(a)]

III.B.6 Only regular operating staff may adjust the processes or emission control device parameters during a compliance source test. No adjustments are to be made within two (2) hours of the start of the tests. Any operating adjustments made during a source test, that are a result of consultation during the tests with source testing personnel, equipment vendors, or consultants, may render the source test invalid. [40 CFR §71.6(a)(3)]

III.B.7 During each test run and for two (2) hours prior to the test and two (2) hours after the completion of the test, the permittee shall record the following information [40 CFR §71.6(a)(3)]:

- a. Fuel characteristics and/or amount of product processed (if applicable).
- b. Visible emissions.
- c. All parametric data which is required to be monitored in Section II for the emission unit being tested.
- d. Other source specific data identified in Section II such as minimum test length (e.g., one hour, 8 hours, 24 hours, etc.), minimum sample volume, other operating conditions to be monitored, correction of O₂, etc.

III.B.8 Each source test shall consist of at least three (3) valid test runs and the emissions results shall be reported as the arithmetic average of all valid test runs and in the

terms of the emission limit. There must be at least 3 valid test runs, unless otherwise specified. [40 CFR §71.6(a)(3)]

III.B.9 The permittee shall correlate applicable emission limitations and other requirements within the report. [GAPCSR, Section 1102.4]

III.B.10 Within sixty (60) days after completion of the performance test, the permittee shall submit to GEPA and the USEPA Regional Administrator, the test report which shall include the operating conditions of the equipment at the time of the test, the analyses of the landfill gas composition, the summarized test results, comparative results with the permit emissions limits, and other pertinent field and laboratory data. [GAPCSR, Section 1102.4; SIP, Section 4.2]

III.C. Recordkeeping Requirements

In addition to the unit specific recordkeeping requirements derived from the applicable requirements for each individual unit and contained in Section II.G, the permittee shall comply with the following generally applicable recordkeeping requirements:

III.C.1 The permittee shall retain records of all required monitoring data and support information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records shall be compiled in a permanent form suitable for inspection and made available to GEPA or their representative upon request. [GAPCSR, Section 1104.12(7)(H)] [40 CFR § 71.6 (a)(3)(ii)]

III.C.2 The permittee shall maintain a log of the date and nature of all inspections and maintenance activities performed at the facility [GAPCSR Section 1104.12(12)].

III.C.3 The permittee shall keep records of required monitoring information that include the following: [40 CFR § 71.6 (a)(3)(ii)]

- a. The date, place, and time of sampling or measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of such analyses; and

- f. The operating conditions as existing at the time of sampling or measurement.

III.D. Reporting Requirements

III.D.1 As required in Section III.H and in conjunction with the requirements of Section III.I of this permit the permittee shall report annually the total tons per year emitted of each regulated air pollutant, including hazardous air pollutants. The reporting of annual emissions is due within sixty (60) days following the end of the each calendar year. Upon the written request of the permittee, the deadline for reporting of annual emissions may be extended, if GEPA determines that reasonable justification exists for the extension. [GAPCSR, Section 1104.24(c)]

III.D.2 The permittee shall report in writing within thirty (30) days the modification, relocation, discontinuance of operation or dismantlement of the landfill gas flare identified in Condition II.A.1 of this permit. [GAPCSR, Section 1104.5(a)]

III.D.3 The permittee shall provide a report to GEPA of the results of all monitoring and recordkeeping required by this permit at least once every six (6) months, starting from the date of issuance of this permit. [GAPCSR, Section 1104.12(7)(D)]

III.D.4 The permittee shall submit to GEPA and USEPA Region 9 reports of any monitoring required under this permit for each six month reporting period (or fraction thereof) from January 1 to June 30 and from July 1 to December 31. All reports shall be submitted to USEPA and shall be postmarked by the 30th day following the end of the reporting period. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with Condition IV.E of this permit. [40 CFR §71.6 (a)(3)(iii)]

- a. The monitoring report must include the following:
- (1) The company name and address,
 - (2) The beginning and ending dates of the reporting period,
 - (3) The emissions unit or activity being monitored,
 - (4) The emissions limitation or standard, including operational requirements and limitations (such as parameter ranges), specified in the permit for which compliance is being monitored,
 - (5) All instances of deviations from permit requirements, including excursions or exceedances as defined under 40 CFR part 64, and the date on which each deviation occurred,

- (6) If the permit requires continuous monitoring of an emissions limit or parameter range, the report must include the total operating time of the emissions unit during the reporting period, the total duration of excess emissions or parameter exceedances during the reporting period, and the total downtime of the continuous monitoring system during the reporting period,
 - (7) If the permit requires periodic monitoring, visual observations, work practice checks, or similar monitoring, the report shall include the total time when such monitoring was not performed during the reporting period and at the source's discretion either the total duration of deviations indicated by such monitoring or the actual records of deviations,
 - (8) All other monitoring results, data, or analyses required to be reported by the applicable requirement, and
 - (9) The name, title, and signature of the responsible official who is certifying to the truth, accuracy, and completeness of the report.
- b. Any report required by an applicable requirement that provides the same information described in paragraph III.C.1.a(1) through (9) above shall satisfy the paragraph III.C.1.a requirement.
[40 CFR §71.6 (a)(3)(iii)]
- c. "Deviation," means any situation in which an emissions unit fails to meet a permit term or condition. A deviation is not always a violation. A deviation can be determined by observation or through review of data obtained from any testing, monitoring, or record keeping established in accordance with §71.6(a)(3)(i) and (a)(3)(ii). For a situation lasting more than 24 hours, each 24-hour period is considered a separate deviation. Included in the meaning of deviation are any of the following:
[40 CFR §71.6 (a)(3)(iii)]:
- (1) A situation when emissions exceed an emission limitation or standard;
 - (2) A situation when there is an excursion of a process or control device;
 - (3) A situation in which observations or data collected demonstrate noncompliance with an emission limitation or standard or any work practice or operating condition required by the permit, or
 - (4) A situation in which an exceedance or an excursion, as defined in the compliance assurance plan (40 CFR Part 64), occurs.

III.D.5 The permittee shall promptly report to USEPA Region 9 deviations from permit or start-up, shut-down malfunction plan requirements, including those attributable to upset conditions as defined in this permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. "Prompt" is defined as follows: [40 CFR §71.6 (a)(3)(iii)]

a. Any definition of "prompt" or a specific timeframe for reporting deviations provided in an underlying applicable requirement as identified in this permit; or

b. Where the underlying applicable requirement does not define prompt or provide a timeframe for reporting deviations, reports of deviations will be submitted based on the following schedule:

(1) For emissions of a hazardous air pollutant or a toxic air pollutant (as identified in the applicable regulation) that continue for more than an hour in excess of permit requirements, the report must be made within 24 hours of the occurrence.

(2) For emissions of any regulated pollutant excluding a hazardous air pollutant or a toxic air pollutant that continue for more than two hours in excess of permit requirements, the report must be made within 48 hours.

(3) For all other deviations from permit requirements, the report shall be submitted with the semi-annual monitoring report required in paragraph III.C.1.a of this permit.

III.D.6 If any of the section III.D.5 reporting requirements are triggered, the source must notify USEPA Region 9 by telephone, facsimile, or electronic mail sent to r9.aeo@epa.gov, based on the timetable listed. A written notice, certified consistent with paragraph III.D.7 of this permit section must be submitted within 10 working days of the occurrence. All deviations reported under section III.D must also be identified in the 6-month report required under paragraph III.D.4. [40 CFR § 71.6 (a)(3)(iii)]

III.D.7 Any application form, report, or compliance certification required to be submitted by this permit shall be certified by a responsible official as to the truth, accuracy, and completeness of the submittal. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. [40 CFR §71.5 (d)]

III.D.8 The permittee shall submit annual reports with the following information. Each report shall be postmarked by January 30 of each year and cover the previous calendar year. For flares, reportable exceedances are defined under 40 CFR §60.758(c). [40 CFR §60.757(f)]

- a. Value and length of time for exceedance of applicable parameters monitored under 40 CFR §60.756(a), (b), (c), and (d).
- b. Description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified under 40 CFR §60.756.
- c. Description and duration of all periods when the control device was not operating for a period exceeding 1 hour and length of time the control device was not operating.
- d. All periods when the collection system was not operating in excess of 5 days.
- e. The location of each exceedance of the 500 parts per million methane concentration as provided in 40 CFR §60.753(d) and the concentration recorded at each location for which an exceedance was recorded in the previous month.
- f. The date of installation and the location of each well or collection system expansion added pursuant to paragraphs (a)(3), (b), and (c)(4) of 40 CFR §60.755.
- g. The initial report shall include:
 - (1) A diagram of the collection system showing collection system positioning including all wells, horizontal collectors, surface collectors, or other gas extraction devices, including the locations of any areas excluded from collection and the proposed sites for the future collection system expansion;
 - (2) The data upon which the sufficient density of wells, horizontal collectors, surface collectors, or other gas extraction devices and the gas mover equipment sizing are based;
 - (3) The documentation of the presence of asbestos or nondegradable material for each area from which collection wells have been excluded based on the presence of asbestos or nondegradable material;

- (4) The sum of the gas generation flow rates for all areas from which collection wells have been excluded based on nonproductivity and the calculations of gas generation flow rate for each excluded area; and
- (5) The provisions for increasing gas mover equipment capacity with increased gas generation flow rate, if the present gas mover equipment is inadequate to move the maximum flow rate expected over the life of the landfill; and
- (6) The provisions for the control of off-site migration.

III.D.9 The permittee shall report to USEPA Region 9 any actions not consistent with the SSM Plan. The initial report shall be within two working days via telephone, facsimile, or electronic mail sent to r9.aeo@epa.gov, followed by a letter delivered or postmarked within seven working days after the end of the event. The letter shall contain the name, title, and signature of the responsible official who is certifying its accuracy, explaining the circumstances of the event, the reasons for not following the SSM Plan, and whether any excess emissions and or parameter monitoring exceedances are believed to have occurred. [40 CFR §63.10(d)(5)]

III.E. Compliance Schedule

- III.E.1 For applicable requirements with which the source is in compliance, the source will continue to comply with such requirements. [GAPCSR, Section 1104.8(b)(2)(A)]
- III.E.2 For applicable requirements which become applicable during the permit term, the source shall meet such applicable requirements on a timely basis. [GAPCSR, Section 1104.8(b)(2)(B)]

III.F. Compliance Certifications

- III.F.1 The compliance plan and compliance certification submittal requirements shall be in accordance with Sections 1104.8 and 1104.9 of the GAPCSR. The compliance certification shall be submitted to GEPA and the USEPA Regional Administrator once per year, or more frequently as set by any applicable requirement. [GAPCSR, Sections 1104.8 and 1104.9]
- III.F.2 During the permit term, the permittee shall submit at least annually to GEPA, a compliance certification pursuant to Section 1104.9 of the GAPCSR. The permittee shall indicate whether or not compliance is being met with each term or condition of this permit. [GAPCSR, Section 1104.9]

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III.G. General Air Quality Protections

III.G.1 The permittee shall not dispose of combustible material by open burning, or cause, suffer, allow, or permit open burning of combustible material within Guam, except as provided in Sections 1103.11 (b) through (e) of the GAPCSR. [GAPCSR, Section 1103.11; SIP, Section 6.1]

III.G.2 Control of Odors in Ambient Air

- a. The permittee shall not discharge or cause to be discharged into the atmosphere from any source whatsoever, such quantities of odorous emissions which is injurious to health, or is indecent or offensive to the senses, which affects at the same time an entire community or neighborhood, or any considerable number of persons, so as to unduly interfere with the comfortable enjoyment of life or property of such community, neighborhood or persons. It is a creation of a condition which causes injury to the public welfare. [GAPCSR, Section 1103.12(a); SIP, Section 11.1]
- b. An odor occurrence shall be deemed a violation when a complaint is received by the Administrator and the Administrator is able to detect the odor. This detection must be verified by the Department of Public Health, Environmental Health Section for a person to be found in violation of subsection (a) of this condition. [GAPCSR, Section 1103.12(b); SIP, Section 11.2]
- c. The odor of growing vegetation, and chemical fertilizers and insecticides when used properly, or when persons can demonstrate to the Administrator that the best practical operation or treatment is being implemented, shall not be considered objectionable for the purposes of this requirement. [GAPCSR, Section 1103.12(c); SIP, Section 11.3]

III.G.3 The permittee shall comply with the asbestos requirements of 40 CFR 61, Subpart M (as amended and incorporated in Section 1103.13 of the GAPCSR), including requirements for demolition and renovation projects. [GAPCSR, Section 1103.13]

III.H. Annual Emissions Reporting Requirements

III.H.1 The reporting period for the annual emissions, including emissions from the emission units identified in Condition II.A.1 of this permit, shall be from January 1 to December 31 of each calendar year. All reports shall be submitted to GEPA along with the annual fee due. The report shall be mailed to [GAPCSR, Section 1104.24(c)]:

Administrator
Guam Environmental Protection Agency
Air and Land Division
Air Pollution Control Program
P.O. Box 22439 GMF
Barrigada, Guam 96921

All applicable correspondences and records with this permit submitted to GEPA shall have duplicate copies forwarded to:

Director, Air Division (Attn: AIR-5)
U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105

III.H.2 The permittee shall retain the information submitted, including all emissions calculations. These records shall be in a permanent form suitable for inspection, retained for a minimum of five (5) years, and made available to GEPA upon request. [GAPCSR, Section 1104.12(7)(H)]

III.H.3 Any information submitted to GEPA without a request for confidentiality shall be considered public record. [GAPCSR, Section 1102.7]

III.H.4 The permittee may request confidential treatment of specific information by submitting a written request to the Administrator identifying the specific information that is to be accorded confidential treatment. [GAPCSR, Section 1102.7(b)]

III.I. Fee Payment

III.I.1 The permittee shall submit fees in accordance with GAPCSR, Sections 1104.21 through 1104.24. [GAPCSR, Section 1104.12(9)(K)]

III.I.2 The permittee shall complete and submit the Annual Fee Calculation Worksheet, including all emissions calculations, with the required annual fee. The permittee shall make copies for future use. [GAPCSR, Section 1104.24(l)]

III.I.3 Annual fees shall be paid in full: [GAPCSR, Section 1104.24 (a)]

- a. Within sixty (60) days after the end of each calendar year;
- b. Within thirty (30) days after permanent discontinuance of the air emission source.

III.I.4 The permittee shall be assessed a Six Dollars (\$6.00) per ton per pollutant base rate of the total annual emission. However, the minimum annual fee due shall be Five Hundred Dollars (\$500.00) for each valid permit held during the prior calendar year; or Forty-Two Dollars (\$42.00) per month for any fraction of the year the permit is valid after the last calendar year for which annual fee was paid. [GAPCSR, Section 1104.24(g)]

III.I.5 If any part of the annual fee is not paid within thirty (30) days after the due date, a late penalty of five percent (5%) of the amount due shall at once accrue and be added thereto. Thereafter, on the first day of each calendar month during which part of the annual fee or any prior accrued late payment penalty remains unpaid, an additional late payment penalty of five percent (5%) of the then unpaid balance shall accrue and be added thereto. [GAPCSR, Section 1104.25(b)]

III.I.6 If any annual fee, including the late payment penalty required by the GAPCSR is not paid in full within thirty (30) days after the due date, the Administrator may terminate or suspend any or all of the owner or operator's air pollution control permit, after affording the opportunity for a hearing in accordance with Section 1104.19 or Section 1102.14 of the GAPCSR [GAPCSR, Section 1104.25(c)]

III.I.7 The annual emissions data for which the annual fees are based shall accompany the submittal of any annual fees and submitted on forms furnished by GEPA. [GAPCSR, Section 1104.24(c)]

III.I.8 Check payments shall be made payable to the Treasurer of Guam along with a notation that the funds be deposited into GEPA's Air Pollution Control Special Fund. [GAPCSR, Section 1104.21(d)]

III.I.9 The annual fees and emissions data shall be mailed to [GAPCSR, Section 1104.24]:

Administrator
Guam Environmental Protection Agency
Air and Land Division
Air Pollution Control Program
P.O. Box 22439 GMF
Barrigada, Guam 96921

All applicable correspondences and records with this permit submitted to GEPA shall have duplicate copies forwarded to:

Director, Air Division (Attn: AIR-5)
U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105

III.J. NSPS and NESHAP General Provisions

III.J.1 All requests, reports, applications, submittals, and other communications to the Administrator pursuant to 40 CFR Part 60 shall be submitted to the USEPA Region 9 office at the following address [40 CFR §60.4(a)]:

Director, Air Division (Attn: AIR-1)
USEPA Region IX
75 Hawthorne Street
San Francisco, CA 94105

III.J.2 The permittee shall provide written notification to USEPA of any reconstruction of an affected facility, or any physical or operational change to an affected facility which may increase the emission rate of any air pollutant to which a standard applies, in accordance with 40 CFR 60.7. [40 CFR §60.7(a)]

III.J.3 The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. [40 CFR §60.7(b)]

III.J.4 The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports and records. [40 CFR §71.6(a)(3)(ii), 40 CFR §60.7(f)]

III.J.5 The availability to the public of information provided to, or otherwise obtained by, the USEPA Administrator under this permit shall be governed by 40 CFR Part 2. (Information submitted voluntarily to the Administrator for the purposes of compliance with 40 CFR 60.5 and 60.6 is governed by 40 CFR 2.201 through 2.213 and not by 40 CFR 2.301.) [40 CFR §60.9]

- III.J.6 At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate this facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [40 CFR §60.11(d)]
- III.J.7 For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in 40 CFR Part 60, nothing shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed. [40 CFR §60.11(g)]
- III.J.8 No owner or operator subject to the provisions 40 CFR Part 60 or CFR Part 63 shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. [40 CFR §60.12, 40 CFR §63.4(b)]
- III.J.9 With respect to compliance with all New Source Performance Standards (NSPS) of 40 CFR Part 60, the permittee shall comply with the "General notification and reporting requirements" found in 40 CFR 60.19. [40 CFR §60.19]
- III.J.10 With respect to compliance with all National Emission Standards for Hazardous Air Pollutants (NESHAP) of 40 CFR Part 63, the permittee shall comply with the "Notification requirements" found in 40 CFR 63.9. [40 CFR §63.9]
- III.J.11 When actions taken by the permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) are consistent with the procedures specified in the startup, shutdown, and malfunction plan, the owner the permittee must keep records for that event which demonstrate that the procedures specified in the plan were followed. These records may take the form of a "checklist," or other effective form of recordkeeping that confirms conformance with the startup, shutdown, and malfunction plan for that event. In addition, the permittee must keep records of these events as specified in §63.10(b), including records of the occurrence and duration of each startup, shutdown, or malfunction of operation and each malfunction of the air pollution control and monitoring equipment. Furthermore, the permittee shall confirm that actions taken during the relevant reporting period during periods of startup, shutdown, and malfunction were consistent with the startup, shutdown and

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malfunction plan in the semiannual (or more frequent) startup, shutdown, and malfunction report required in §63.10(d)(5). [40 CFR §63.6(e)(3)(iii)]

III.J.12 If an action taken by the permittee during a startup, shutdown, or malfunction (including an action taken to correct a malfunction) is not consistent with the procedures specified in the startup, shutdown, and malfunction plan, and the permittee exceeds any applicable emission limitation in the relevant emission standard, then the permittee must record the actions taken for that event and must report such actions within 2 working days after commencing actions inconsistent with the plan, followed by a letter within 7 working days after the end of the event, in accordance with §63.10(d)(5) (unless the owner or operator makes alternative reporting arrangements, in advance, with the Administrator). [40 CFR §63.6(e)(3)(iv)]

IV. Title V Administrative Requirements

IV.A. Blanket Compliance Statement

The permittee shall comply with all the terms and conditions of this permit. Any permit noncompliance constitutes a violation of the GAPCSR and, for all federally enforceable terms and conditions, the CAA, and is grounds for enforcement action, permit termination, suspension, reopening, or amendment, or for denial of a permit renewal application. Permit noncompliance shall be subject to the penalties and remedies provided for in Section 49116 of Chapter 49, Part 2, Division 2, Part 1 of Title 10 of the GCA. [GAPCSR, Section 1104.12(9)(A) and 1102.12; SIP, Section 4.4]

IV.B. Duty to Provide and Supplement Information

The permittee shall furnish, in a timely manner, any information or record requested in writing by GEPA to determine whether cause exists for terminating, suspending, reopening, or amending the permit, or to determine compliance with the permit. Upon request, the permittee shall also furnish to GEPA copies of records required to be kept by the permit. For information claimed confidential, the permittee shall furnish such records to GEPA with a claim of confidentiality. [GAPCSR, Section 1104.12(9)(H)]

IV.C. Submissions

Any document (including reports, compliance plans and compliance certifications) required to be submitted by this permit shall be certified by a responsible official. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete in accordance with 1102.3 and shall be mailed or forwarded to the following address [GAPCSR, Sections 1102.3 and 1104.12(9)(L)]:

Administrator
Guam Environmental Protection Agency
Air and Land Division
Air Pollution Control Program
P.O. Box 22439 GMF
Barrigada, Guam 96921

All applicable correspondences and records with this permit submitted to GEPA shall have duplicate copies forwarded to:

Director, Air Division (Attn: AIR-5)
U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105

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IV.D. Severability Clause

If any term or condition of this permit becomes invalid as a result of a challenge to a portion of this permit, the other terms and conditions of this permit shall not be affected and remain valid. [GAPCSR, Section 1104.12(9)(B)]

IV.E. Circumvention

The permittee shall not cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant which would otherwise violate these regulations. This provision does not prohibit recycling, burning as fuel or otherwise further processing material which would violate an emission regulation if released to the atmosphere, so long as the facility in which that material is used does not violate applicable emission regulations. [SIP, Section 17.2]

IV.F. Permit Actions

This permit will be revoked if the Agency finds willful or continued violations of the standards and regulations. [GAPCSR, Sections 1104.12(9)(A), 1104.18(a)(4), and 1104.18(b)(3); SIP, Section 3.7(c)]

IV.G. Reopening for Cause

This permit may be terminated, suspended, reopened, or amended for cause pursuant to Section 1104.18 of the GAPCSR, after affording the permittee an opportunity for a hearing in accordance with Section 1102.14 or 10 GCA 49111. [GAPCSR, Section 1104.12(9)(D)]

IV.H. Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege. [GAPCSR, Section 1104.12(9)(E)]

IV.I. Inspection and Entry

IV.I.1 The permittee shall allow GEPA, the Regional Administrator for the USEPA and/or an authorized representative, upon presentation of credentials or other documents required by law:

- a. To enter the premises where a source is located or emission-related activity is conducted, or where records must be kept under the conditions of the permit and inspect at reasonable times all facilities, equipment, practices, operations, or records covered under the terms and conditions of the permit and request copies of records or copy records required by the permit; and
- b. To sample or monitor at reasonable times substances or parameters to assure compliance with the permit or applicable requirements. [GAPCSR, Section 1104.12(9)(M)]

IV.L. Permit Expiration and Renewal

IV.L.1 This permit is issued for a fixed term of five years from the date of issuance. [GAPCSR, Section 1104.11; SIP Section 3.1(b)(4)]

IV.L.2 Application for permit renewal shall be submitted no more than eighteen (18) months prior to the date of permit expiration. Application for permit renewal shall be submitted no later than six (6) months prior to the date of permit expiration. Late applications shall be subject to penalties pursuant to Section 1104.25 of the GAPCSR. [GAPCSR, Section 1104.6(d); SIP Section 3.1(b)(4)]

IV.L.3 This permit shall remain valid past the expiration date and the air pollution emission source shall not be in violation for failing to have an air pollution control permit, until the Administrator has issued or denied the renewal of the air pollution control permit, provided [GAPCSR, Section 1104.2(d)]:

- a. A complete renewal application has been submitted and the owner or operator acts consistently with the permit previously granted, and the application on which it was based, and all plans, specifications, and other information submitted as part of the application; and
- b. The owner or operator has submitted to the Administrator within the specified deadlines, all requested additional information deemed necessary to evaluate or take final action on the renewal application as described in Section 1104.6 of the GAPCSR.

IV.M. Permit Modifications

Applications for modification of this permit are subject to the same requirements as the initial application including all requirements pursuant to Section 1104.6 (c) of the GAPCSR. The permittee shall submit a description of the modification, identifying all proposed changes, including any changes to the source operations, work practices, equipment design, source emissions, or any monitoring, record keeping, and reporting procedures. Each change from the permit application for this permit shall be identified on the application for the permit modification. [GAPCSR, Section 1104.6(f)]

IV.N. Malfunction

IV.N.1 Except for emergencies which result in noncompliance with any technology-based emission limitation in accordance with Section 1104.17 of the GAPCSR, in the event any emission unit, air pollution control equipment, or related equipment breaks down in such a manner as to cause the emission of air pollutants in violation of GAPCSR, or this permit, the permittee shall immediately notify, within twenty-four (24) hours, GEPA of the failure or breakdown, unless the protection of personnel or public health or safety demands immediate attention to the failure or breakdown and makes such notification infeasible. In the latter case, the notice shall be provided as soon as practicable. The submittal of these

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notices shall not be a defense to an enforcement action. Within five (5) working days of this initial notification, the permittee shall also submit, in writing, the following information:

- a. Identification of emission points;
- b. Magnitude of the excess emissions;
- c. Time and duration of the excess emissions;
- d. Identity of the process or control equipment causing the excess emissions;
- e. Cause and nature of the excess emissions;
- f. Description of the steps taken to remedy the situation, prevent a recurrence, limit the excessive emissions, and assure that the breakdown does not interfere with the attainment and maintenance of the National Ambient Air Quality Standards (NAAQS) and Guam ambient air quality standards;
- g. Documentation that the equipment or process was at all times maintained and operated in a manner consistent with good practice for minimizing emissions; and
- h. A statement that the excess emissions are not part of a recurring pattern indicative of inadequate design, operation, or maintenance. [GAPCSR, Section 1102.9]

IV.O. Agency Notifications

IV.O.1 The permittee shall notify the Administrator in writing of the following dates:

- a. The anticipated date of initial start-up for each emission unit of a new source or significant modification not more than sixty (60) days or less than thirty (30) days prior to such date.
- b. The actual date of construction commencement within fifteen (15) days after such date.
- c. The actual date of start-up within fifteen (15) days after such date. [GAPCSR, Section 1104.12(9)(G)]

IV.O.2 The permittee shall notify GEPA in writing, of the intent to shut down air pollution control equipment for necessary scheduled maintenance at least twenty-four (24) hours prior to the planned shutdown. The submittal of this notice shall not be a defense to an enforcement action. The notice shall include the following:

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- a. Identification of the specific equipment to be taken out of service, as well as its location and permit number;
- b. The expected length of time that the air pollution control equipment will be out of service;
- c. The nature and quantity of emissions of air pollutants likely to be emitted during the shutdown period;
- d. Measures such as the use of off-shift labor and equipment that will be taken to minimize the length of the shutdown period; and
- e. The reasons why it would be impossible or impractical to shut down the source operation during the maintenance period. [GAPCSR, Section 1102.8; SIP, Section 4.3]

IV.O.3 A copy of applicable correspondence or records submitted to GEPA shall be provided to the USEPA pursuant to Section 1104.15 of the GAPCSR. [GAPCSR, Section 1104.12(9)(I)]

IV.O.4 Within thirty (30) days of permanent discontinuance of the operation, modification, relocation, or construction of any of the above units, the responsible official shall report the discontinuance in writing to the Administrator. [GAPCSR, Section 1104.5(a)]

IV.P. Miscellaneous Conditions

IV.P.1 Unless specifically identified, the terms and conditions contained in this permit are consistent with the applicable requirement on which each term or condition is based. [Section 49107(7)(c)(2) of Chapter 49, Part 2, Division 2, Part 1 of Title 10 of the GCA]

IV.P.2 This permit, or a copy thereof, shall be maintained at or near the source for which this permit was issued and shall be made available for inspection upon request. [GAPCSR, Section 1104.4(a); SIP, Section 3.12]

IV.P.3 This permit shall not be willfully defaced, altered, forged, counterfeited, or falsified. [GAPCSR, Section 1104.4(b); SIP, Section 3.13]

IV.P.4 The facility covered by this permit shall be constructed and operated in accordance with the application, and any information submitted as part of the application, for this permit. There shall be no deviation from this permit condition unless additional or revised plans are submitted to and approved by GEPA, and the permit is amended to allow for such deviation. [GAPCSR, Section 1104.12(12)]

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IV.P.5 This permit (a) does not release the permittee from compliance with other applicable statutes of Guam, or with applicable local or federal laws, regulations, or ordinances, and (b) shall not constitute, nor be construed to be an approval of the design of the source. [GAPCSR, Sections 1104.2(e) and 1104.12(11)]

IV.P.6 The permittee shall not use as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the terms and conditions of this permit. [GAPCSR, Section 1104.12(9)(C)]

IV.P.7 The filing of a request by the permittee for a permit termination, suspension, reopening, or amendment, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [GAPCSR, Section 1104.12(9)(D)]

IV.P.8 This permit shall become invalid with respect to any authorized construction if construction is not commenced as follows:

- a. Within thirty (30) days of permanent discontinuance of the construction, modification, relocation or operation of any permitted air pollution emission source, the responsible official shall report the discontinuance in writing to the Administrator.
- b. For phased construction projects, each phase shall commence construction within eighteen (18) months of the projected and approved commencement dates in the permit. [GAPCSR, Sections 1104.5(b), 1104.5(c), and 1104.12(9)(F)]

IV.P.9 GEPA may extend the time periods specified in Condition IV.P.8 of this permit upon a satisfactory showing that an extension is justified. Request for an extension shall be submitted in writing to GEPA. [GAPCSR, Section 1104.5(d)]

IV.P.10 The permittee may request confidential treatment of any records in accordance with Section 1102.7 of the GAPCSR. [GAPCSR, Section 1104.12(9)(J)]

IV.P.11 The terms and conditions included in this permit, including any provision designed to limit a source's potential to emit, are federally enforceable unless such terms, conditions, or requirements are specifically designated as not federally enforceable. [GAPCSR, Section 1104.14]

**GUAM EPA
TITLE V FEDERAL OPERATING PERMIT
STATEMENT OF BASIS**

Layon Municipal Solid Waste Landfill

Permit No. FO-020

Facility ID:	FO-020
Facility Name:	Layon Municipal Solid Waste Landfill
Mailing Address:	P.O. Box 2977 Inarajan, Guam 96932
Responsible Official:	Christopher A. Lund; Gershman, Brickner, & Bratton, Inc. (GBB)
Title:	Receiver for the Court
Phone Number:	(671) 646-3249
Contact Name:	Christopher A. Lund; Gershman, Brickner, & Bratton, Inc. (GBB)
Title:	Receiver for the Court
Phone Number:	(671) 646-3249
Person Responsible for Recordkeeping:	Christopher A. Lund; Gershman, Brickner, & Bratton, Inc. (GBB)
Title:	Receiver for the Court
Phone Number:	(671) 646-3249

I. Purpose

The purpose of this engineering evaluation is to identify all applicable requirements, determine if the facility will comply with those applicable requirements, and provide the legal and factual basis for proposed permit conditions.

II. Facility Location

The Layon Landfill facility is located in Inarajan, Guam.

III. Description of Facility Operations

The facility is a waste disposal facility that accepts and processes the municipal solid waste from the Island of Guam under the SIC 4953.. The sources that have the potential to cause

significant emissions of air pollutants are the landfill surface where the fugitive landfill gas is emitted and the flare to be installed for the purpose of combusting captured landfill gas. There are no insignificant emission sources.

IV. Equipment Listing and Permitting History

A listing of all permitted equipment at the facility is presented in the table below.

Emission Unit Number	Unit Description	Associated Control Equipment
FL-1	Landfill Gas Flare	n/a
LF-1	Landfill Gas Surface Emissions	FL-1

V. Potential to Emit

The annual potential to emit for each significant emission unit is presented below.

Emission Unit Number	Potential to Emit (tons/year)						
	NO_x	VOC	SO₂	PM₁₀	CO	Lead	HAP
LF-1	--	96.4	--	--	1.1	--	3.3
FL-1	24.5	17.4	5.8	6.9	61.2	--	0.6
TOTAL	24.5	113.8	5.8	6.9	62.3	--	3.9

VI. Guam Requirements

The following table lists the applicable requirements from the Guam Air Pollution Control Standards and Regulations (GAPCSR) and from the approved Guam State Implementation Plan (SIP). For rules where an applicability determination was required, a discussion is included below.

Section 1103.2	Guam Ambient Air Quality Standards
Section 1103.3	Visible Emissions
Section 1103.4	Fugitive Dust
Section 1103.11	Open Burning
Section 1103.12	Control of Odors in Ambient Air
Section 1103.13	Asbestos
Section 1104	Permit Program Regulations
Section 1106.2	New Source Performance Standards
SIP, Section 7.5	Particulate Emissions from Fuel Combustion

VI.A. Particulate Matter (PM) Limits for Fuel Burning Equipment

Section 7.5 of the GEPA SIP requires that for fuel burning equipment between 1 MMBtu/hr and 1,000 MMBtu/hr in size, the allowable particulate emissions shall be calculated using the following equation:

$$Y = 1.02 X^{-0.231}$$

Where:

Y = Allowable particulate emission rate (lb/MMBtu)

X = Operating rate (MMBtu/hr)

Assuming a landfill gas methane content of 50%, a methane heating value of 1,012 Btu/scf, and a maximum collection landfill gas rate of 1,845 scfm, the flare is subject to this limit. The allowable PM emission rate for this unit was calculated based on operating load and the equation outlined above. The resulting PM emission limit for this emission unit is 0.40 lb/MMBtu. GEPA believes that no additional monitoring is necessary to ensure compliance with this process weight rate limit.

VII. Federal Requirements

The following table lists the applicable requirements from United States Environmental Protection Agency (USEPA) regulations. For rules where an applicability determination was required, a discussion is included below.

40 CFR Part 60, Subpart A	NSPS General Provisions
40 CFR Part 60, Subpart WWW	NSPS for Municipal Solid Waste Landfills
40 CFR Part 61, Subpart M	Asbestos
40 CFR Part 63, Subpart AAAAA	National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills

VII.A. New Source Performance Standards

VII.A.1 Municipal Solid Waste Landfills

The applicability of the New Source Performance Standard for Municipal Solid Waste Landfills (40 CFR Part 60, Subpart WWW) was reviewed, and it was determined that this regulation applies to the facility. NSPS Subpart WWW applies to municipal solid waste landfills that commenced construction, reconstruction or modification on or after May 30, 1991. The Layon Landfill facility will be constructed after this date, so this NSPS applies. As a result, these requirements have been incorporated into the Title V permit for this facility.

VII.B. National Emission Standards for Hazardous Air Pollutants

VII.B.1 Municipal Solid Waste Landfills

The applicability of the NESHAP for municipal solid waste landfills (40 CFR Part 63, Subpart AAAA) was evaluated for the facility. Subpart AAAA applies to municipal solid waste landfills that have accepted waste since November 8, 1997 or have additional capacity for waste deposition and meet one of the following three criteria:

1. The municipal solid waste landfill is a major source as defined in 40 CFR 63.2;
2. The municipal solid waste landfill is collocated with a major source as defined in 40 CFR 63.2; or
3. The municipal solid waste landfill is an area source landfills that has a design capacity greater than or equal to 2.5 million megagrams (Mg) and 2.5 million cubic meters (m³) and has estimated uncontrolled emissions greater than or equal to 50 Mg/yr NMOC as calculated according to §60.754(a) of the municipal solid waste landfills NSPS in 40 CFR part 60, subpart WWW, the Federal plan, or a USEPA approved and effective State or tribal plan that applies to the landfill.

The landfill is not a major source of HAPs as defined in 40 CFR 63.2 (i.e., 10 tpy or more of any single HAP or 25 tpy of any combination of HAPs) and, therefore, does not meet the first two criteria listed above. The maximum design capacity of the landfill is 9.9 million tons (9.0 million Mg) and potential uncontrolled NMOC emissions are 964 tpy (875 Mg/yr). Therefore, this NESHAP applies to the landfill. As a result, these requirements have been incorporated into the Title V permit for this facility.

VII.C. Compliance Assurance Monitoring

Compliance Assurance Monitoring (CAM) is intended to provide a reasonable assurance of compliance with applicable requirements for large emission units that rely on pollution control device equipment to achieve compliance. The CAM regulations can be found in 40 CFR Part 64. CAM applicability is determined on a pollutant-specific basis. According to these regulations, an emission unit that meets all of the following criteria is subject to CAM:

1. The unit is located at major source required to obtain Part 70 or 71 permit;
2. The unit is subject to an emission limitation for the applicable pollutant;
3. The unit uses a control device (as defined by 40 CFR 64.1) to achieve compliance;
4. The potential precontrolled emissions of an applicable pollutant from the unit are equal to or greater than the major source threshold for that pollutant; and
5. The unit is not otherwise exempted by the CAM regulations.

Regarding the first requirement, the CAM rule (in 40 CFR 64.1) states that “*Part 70 or 71 permit* shall have the same meaning as provided under [40 CFR 70 or 71] provided that it shall also refer to a permit issued, renewed, amended, revised, or modified under any federal permit program promulgated under Title V [of the Clean Air Act].”

After receiving a special exemption from USEPA, GEPA has adopted an “alternate operating permit program” according to the requirements of 40 CFR 69.13. As a result, it was not immediately clear whether this program satisfied the definition in the CAM rule. USEPA Region 9 was consulted on this matter, and made a determination that GEPA’s alternate operating permit program was promulgated under Title V of the Clean Air Act, so facilities located on Guam are potentially subject to CAM.

The surface landfill gas emissions (Unit LF-1) are the only significant source of emissions at this facility and the VOC emissions from this source are controlled by the flare (Unit FL-1). Therefore, only surface landfill gas VOC emissions were further evaluated for CAM applicability.

VII.C.1 CAM Applicability: Unit LF-1 VOC Emissions

Requirement	Requirement Satisfied?	Discussion
Unit located at major source required to obtain Part 70 or 71 permit	Yes	USEPA has determined that the GEPA permit program satisfies this requirement (see above discussion)
Unit subject to emission limitation	Yes, if NMOC emissions above 50 megagrams per year.	NMOC destruction efficiency from GEPA permit and Municipal Solid Waste Landfill NSPS
Unit uses a control device (as defined by 40 CFR 64.1) to achieve compliance	Yes	Flare is listed as a “control device” in 40 CFR 64.1
Potential precontrolled emissions of an applicable pollutant from the unit are equal to or greater than the major source threshold for that pollutant	Yes	Potential uncontrolled NMOC emissions are 964 tpy, which is above the major source threshold of 100 tpy
Unit is not otherwise exempted by the CAM regulations	No	Unit qualifies for an exemption under 40 CFR 64.2(b)(1)(i), as discussed below

The exemptions from the CAM rule are listed in 40 CFR 64.2(b). Within this subsection, 40 CFR 64.2(b)(1)(i) contains an exemption from CAM for “emission limitations or standards proposed by the Administrator after November 15, 1990 pursuant to section 111 or 112 of the [Clean Air] Act.” The only limitations on VOC emissions from the proposed landfill derive from the Landfill NSPS and the Landfill NESHAP. NSPS standards are adopted pursuant to section 111 of the Clean Air Act and NESHAP standards are adopted pursuant to section 112 of the Clean Air Act, so each of these was further evaluated.

The Landfill NSPS was originally proposed on May 30, 1991 (56 FR 24468) and the Landfill NESHAP was originally proposed on November 7, 2000 (65 FR 66672). As a result, VOC emissions from the proposed landfill are not subject to CAM since these emissions are only subject to limits in standards proposed by the Administrator after November 15, 1990.

VIII. Periodic Monitoring

Requirement	Requirement Condition #	Monitoring/ Recordkeeping	Monitoring/ Recordkeeping Condition #
Landfill gas collection system operating requirements	II.B.1, II.B.2, II.C.1, and II.C.2	N/A	N/A
Capture efficiency of landfill gas collection system	II.B.3	N/A	N/A
Vent gases to flare	II.B.4	N/A	N/A
Allowable PM emission rate	II.B.5	N/A	N/A
Opacity limit	II.B.6	N/A	N/A
Gauge pressure at each individual well	II.C.1	Monthly gauge pressure measurement	II.F.1.a
Nitrogen concentration in the landfill gas	II.C.2	Monthly nitrogen concentration monitoring	II.F.1.b
Oxygen concentration in the landfill gas	II.C.2	Monthly oxygen concentration monitoring	II.F.1.b

Requirement	Requirement Condition #	Monitoring/ Recordkeeping	Monitoring/ Recordkeeping Condition #
Temperature of the landfill gas	II.C.2	Monthly temperature monitoring	II.F.1.c
Surface concentrations of methane	II.C.5	Quarterly surface methane gas sampling	II.D.2
Preventative maintenance	III.A.1	Maintenance recordkeeping	III.C.1 and III.C.2
Reasonable precautions against airborne fugitive dust	III.A.3	N/A	N/A
Fugitive dust discharge limitations	III.A.4	N/A	N/A



December 1, 2009

Ms. Lorilee T. Crisostomo
Administrator
Guam Environmental Protection Agency
P.O. Box 22439 GMF
Barrigada, Guam 96921

RE: Acceptance of Solid Waste Facility Permit

Dear Ms. Crisotomo:

In our capacity as Receiver for the Solid Waste Management Division, we accept the permit and the conditions associated with the permit for the construction and operation of the Layon Municipal Solid Waste Landfill. As you know, this is an important milestone in the process of bringing Guam into compliance with the Consent Decree and establishing a modern and environmentally compliant solid waste system for Guam.

We appreciate the professionalism and courtesy shown by you and your staff during this rigorous process and we look forward to working with you as we complete this vital project.

Sincerely,

A handwritten signature in black ink, appearing to read "David L. Manning".

David L. Manning
GBB's Receiver Representative

c.c. Mr. Harvey Gershman
Mr. Chris Lund

Government of Guam
Department of Public Works, Solid Waste Management Division
542 North Marine Corps Drive, Tamuning, Guam 96913
Phone: (671) 646-4379, Ext. 201 or 212
www.GuamSolidWasteReceiver.org
www.gbbinc.com

Actual Solid Waste Delivered to the Ordot Dump

Weekly June 1, 2009 Forward

Description	6/1 to 6/6	6/8 to 6/13	6/15 to 6/20	6/22 to 6/27	6/29 to 7/4
	Net Wt.				
Commercial Solid Waste (Compacted)	752,751 lb	564,860 lb	816,460 lb	714,580 lb	638,700 lb
Commercial Solid Waste (Non-Compacted)	1,045,520 lb	963,420 lb	1,167,760 lb	1,170,940 lb	1,198,000 lb
Agat Transfer Station (Non-Compacted)	24,160 lb	25,300 lb	25,960 lb	25,460 lb	29,780 lb
Dededo Transfer Station (Non-Compacted)	61,760 lb	89,120 lb	79,960 lb	75,360 lb	70,880 lb
Malojloj Transfer Station (Non-Compacted)	22,720 lb	11,300 lb	19,780 lb	20,800 lb	13,260 lb
Ordot Transfer Station (Non-Compacted)	43,020 lb	43,840 lb	35,700 lb	43,720 lb	56,900 lb
Mayors' Solid Waste (Non-Compacted)	47,740 lb	33,080 lb	63,640 lb	49,540 lb	55,620 lb
GovGuam Solid Waste (Non-Compacted)	240,240 lb	60,560 lb	104,840 lb	160,780 lb	116,440 lb
Residential Packer Trucks SWMD	703,980 lb	655,940 lb	711,000 lb	721,640 lb	709,360 lb
Grand Total:	2,941,891 lb	2,447,420 lb	3,025,100 lb	2,982,820 lb	2,888,940 lb
Weekly Tons of MSW	1,471	1,224	1,513	1,491	1,444
Average Daily Tons of MSW	245	204	252	249	241
Projected Annual Tons of MSW	76,489	63,633	78,653	77,553	75,112
Cover Material-DPW	2,604,449 lb	2,286,220 lb	2,337,260 lb	2,214,620 lb	2,119,420 lb
Non DPW Cover Material	405,920 lb	382,740 lb	833,780 lb	719,960 lb	1,220,100 lb
Total Cover material	3,010,369 lb	2,668,960 lb	3,171,040 lb	2,934,580 lb	3,339,520 lb
Cover % of MSW	102%	109%	105%	98%	116%
Grand Total	5,952,260 lb	5,116,380 lb	6,196,140 lb	5,917,400 lb	6,228,460 lb

Actual Solid Waste Delivered to the Ordot Dump

Weekly June 1, 2009 Forward

Description	<u>7/6 to 7/11</u>	<u>7/13 to 7/18</u>	<u>7/20 to 7/25</u>	<u>7/27 to 8/1</u>	<u>8/3 to 8/8</u>
	Net Wt.				
Commercial Solid Waste (Compacted)	706,680 lb	677,520 lb	697,119 lb	726,600 lb	775,840 lb
Commercial Solid Waste (Non-Compacted)	1,299,080 lb	1,315,380 lb	1,236,846 lb	1,351,040 lb	1,485,080 lb
Agat Transfer Station (Non-Compacted)	26,760 lb	35,600 lb	31,660 lb	34,260 lb	32,940 lb
Dededo Transfer Station (Non-Compacted)	78,900 lb	96,500 lb	90,840 lb	72,400 lb	99,540 lb
Malojloj Transfer Station (Non-Compacted)	22,340 lb	24,900 lb	20,600 lb	24,420 lb	22,740 lb
Ordot Transfer Station (Non-Compacted)	60,300 lb	61,260 lb	55,520 lb	55,260 lb	59,020 lb
Mayors' Solid Waste (Non-Compacted)	74,460 lb	71,280 lb	52,260 lb	51,480 lb	87,280 lb
GovGuam Solid Waste (Non-Compacted)	40,000 lb	28,520 lb	60,360 lb	42,400 lb	47,360 lb
Residential Packer Trucks SWMD	768,300 lb	778,460 lb	753,220 lb	765,960 lb	830,540 lb
Grand Total:	3,076,820 lb	3,089,420 lb	2,998,425 lb	3,123,820 lb	3,440,340 lb
Weekly Tons of MSW	1,538	1,545	1,499	1,562	1,720
Average Daily Tons of MSW	256	257	250	260	287
Projected Annual Tons of MSW	79,997	80,325	77,959	81,219	89,449
Cover Material-DPW	2,935,660	2,396,460 lb	1,341,420 lb	1,296,140 lb	1,987,340 lb
Non DPW Cover Material	578,640	266,420 lb	448,860 lb	1,458,180 lb	271,680 lb
Total Cover material	3,514,300	2,662,880 lb	1,790,280 lb	2,754,320 lb	2,259,020 lb
Cover % of MSW	114%	86%	60%	88%	66%
Grand Total	6,591,120	5,752,300 lb	4,788,705 lb	5,878,140 lb	5,699,360 lb

Actual Solid Waste Delivered to the Ordot Dump

Weekly June 1, 2009 Forward

Description	8/10 to 8/15	8/17 to 8/22	8/24 to 8/29	8/31 to 9/5	9/7 to 9/12
	Net Wt.				
Commercial Solid Waste (Compacted)	861,760 lb	792,640 lb	766,880 lb	684,300 lb	736,120 lb
Commercial Solid Waste (Non-Compacted)	1,393,060 lb	1,425,220 lb	1,344,520 lb	1,291,420 lb	1,306,520 lb
Agat Transfer Station (Non-Compacted)	39,260 lb	24,560 lb	31,440 lb	32,220 lb	27,700 lb
Dededo Transfer Station (Non-Compacted)	89,540 lb	98,100 lb	93,160 lb	86,660 lb	78,020 lb
Malojloj Transfer Station (Non-Compacted)	28,220 lb	18,520 lb	32,960 lb	30,940 lb	22,220 lb
Ordot Transfer Station (Non-Compacted)	70,040 lb	82,480 lb	65,300 lb	71,700 lb	46,140 lb
Mayors' Solid Waste (Non-Compacted)	63,340 lb	61,800 lb	64,320 lb	54,440 lb	89,000 lb
GovGuam Solid Waste (Non-Compacted)	64,200 lb	44,640 lb	77,480 lb	51,300 lb	78,460 lb
Residential Packer Trucks SWMD	797,680 lb	767,680 lb	759,260 lb	748,300 lb	753,380 lb
Grand Total:	3,407,100 lb	3,315,640 lb	3,235,320 lb	3,051,280 lb	3,137,560 lb
Weekly Tons of MSW	1,704	1,658	1,618	1,526	1,569
Average Daily Tons of MSW	284	276	270	254	261
Projected Annual Tons of MSW	88,585	86,207	84,118	79,333	81,577
Cover Material-DPW	1,954,780 lb	2,020,020 lb	2,890,160 lb	2,892,300 lb	1,793,517 lb
Non DPW Cover Material	577,660 lb	177,340 lb	64,960 lb	121,580 lb	0 lb
Total Cover material	2,532,440 lb	2,197,360 lb	2,955,120 lb	3,013,880 lb	1,793,517 lb
Cover % of MSW	74%	66%	91%	99%	57%
Grand Total	5,939,540 lb	5,513,000 lb	6,190,440 lb	6,065,160 lb	4,931,077 lb

Actual Solid Waste Delivered to the Ordot Dump

Weekly June 1, 2009 Forward

Description	9/14 to 9/19	9/21 to 9/26	9/28 to 10/03	10/5 to 10/10	10/12 to 10/17
	Net Wt.				
Commercial Solid Waste (Compacted)	689,900 lb	748,400 lb	758,760 lb	783,020 lb	703,060 lb
Commercial Solid Waste (Non-Compacted)	1,190,560 lb	1,389,900 lb	1,395,100 lb	1,303,540 lb	1,142,420 lb
Agat Transfer Station (Non-Compacted)	25,960 lb	27,340 lb	36,380 lb	30,920 lb	31,440 lb
Dededo Transfer Station (Non-Compacted)	100,520 lb	83,500 lb	119,020 lb	91,940 lb	86,820 lb
Malojloj Transfer Station (Non-Compacted)	26,960 lb	25,960 lb	24,980 lb	24,360 lb	23,360 lb
Ordot Transfer Station (Non-Compacted)	55,860 lb	65,020 lb	84,740 lb	61,440 lb	63,720 lb
Mayors' Solid Waste (Non-Compacted)	68,800 lb	55,980 lb	57,660 lb	46,540 lb	63,500 lb
GovGuam Solid Waste (Non-Compacted)	38,300 lb	73,380 lb	61,740 lb	79,180 lb	51,560 lb
Residential Packer Trucks SWMD	727,080 lb	765,900 lb	755,860 lb	801,040 lb	657,620 lb
Grand Total:	2,923,940 lb	3,235,380 lb	3,294,240 lb	3,221,980 lb	2,823,500 lb
Weekly Tons of MSW	1,462	1,618	1,647	1,611	1,412
Average Daily Tons of MSW	244	270	275	268	235
Projected Annual Tons of MSW	76,022	84,120	85,650	83,771	73,411
Cover Material-DPW	1,962,140 lb	4,368,680 lb	2,476,380 lb	2,521,880 lb	2263320 lb
Non DPW Cover Material	0 lb	- lb	176,540 lb	578,420 lb	469260 lb
Total Cover material	1,962,140 lb	4,368,680 lb	2,652,920 lb	3,100,300 lb	2,732,580 lb
Cover % of MSW	67%	135%	81%	96%	97%
Grand Total	4,886,080 lb	7,604,060 lb	5,947,160 lb	6,322,280 lb	5,556,080 lb

Actual Solid Waste Delivered to the Ordot Dump

Weekly June 1, 2009 Forward

Description	10/19 to 10/24	10/26 to 10/31	11/2 to 11/7	11/9 to 11/14	11/16 to 11/21
	Net Wt.				
Commercial Solid Waste (Compacted)	763,560 lb	781,360 lb	732,840 lb	715,760 lb	713,300 lb
Commercial Solid Waste (Non-Compacted)	1,293,420 lb	1,343,900 lb	1,321,340 lb	1,248,900 lb	1,223,580 lb
Agat Transfer Station (Non-Compacted)	32,820 lb	27,160 lb	31,460 lb	32,600 lb	23,480 lb
Dededo Transfer Station (Non-Compacted)	87,440 lb	89,580 lb	99,340 lb	84,460 lb	80,460 lb
Malojloj Transfer Station (Non-Compacted)	27,300 lb	20,780 lb	31,160 lb	16,080 lb	21,160 lb
Ordot Transfer Station (Non-Compacted)	51,160 lb	60,960 lb	72,100 lb	55,020 lb	59,600 lb
Mayors' Solid Waste (Non-Compacted)	52,400 lb	68,860 lb	56,320 lb	35,140 lb	57,640 lb
GovGuam Solid Waste (Non-Compacted)	65,680 lb	5,500 lb	54,860 lb	64,280 lb	117,720 lb
Residential Packer Trucks SWMD	744,360 lb	741,480 lb	788,120 lb	722,200 lb	740,680 lb
Grand Total:	3,118,140 lb	3,139,580 lb	3,187,540 lb	2,974,440 lb	3,037,620 lb
Weekly Tons of MSW	1,559	1,570	1,594	1,487	1,519
Average Daily Tons of MSW	260	262	266	248	253
Projected Annual Tons of MSW	81,072	81,629	82,876	77,335	78,978
Cover Material-DPW	2,643,220 lb	2,789,640 lb	2,380,200 lb	2,167,820 lb	3,143,420 lb
Non DPW Cover Material	0 lb	- lb	298,640 lb	67,120 lb	35,100 lb
Total Cover material	2,643,220 lb	2,789,640 lb	2,678,840 lb	2,234,940 lb	3,178,520 lb
Cover % of MSW	85%	89%	84%	75%	105%
Grand Total	5,761,360 lb	5,929,220 lb	5,866,380 lb	5,209,380 lb	6,216,140 lb

Actual Solid Waste Delivered to the Ordot Dump

Weekly June 1, 2009 Forward

Description	<u>11/23 to 11/28</u>	<u>11/30 to 12/5</u>	<u>12/7 to 12/12</u>	<u>12/14 to 12/19</u>	<u>12/21 to 12/26</u>
	Net Wt.	Net Wt.	Net Wt.	Net Wt.	Net Wt.
Commercial Solid Waste (Compacted)	641,880 lb	881,060 lb	777,260 lb	736,420 lb	611,120 lb
Commercial Solid Waste (Non-Compacted)	1,298,900 lb	1,402,740 lb	1,301,800 lb	1,244,040 lb	1,291,940 lb
Agat Transfer Station (Non-Compacted)	29,520 lb	35,660 lb	32,440 lb	27,380 lb	30,280 lb
Dededo Transfer Station (Non-Compacted)	86,320 lb	111,120 lb	78,700 lb	115,000 lb	90,600 lb
Malojloj Transfer Station (Non-Compacted)	17,580 lb	42,460 lb	24,520 lb	18,960 lb	29,820 lb
Ordot Transfer Station (Non-Compacted)	45,280 lb	73,680 lb	65,320 lb	52,820 lb	57,340 lb
Mayors' Solid Waste (Non-Compacted)	58,420 lb	46,900 lb	44,540 lb	64,800 lb	48,720 lb
GovGuam Solid Waste (Non-Compacted)	149,220 lb	57,120 lb	106,300 lb	181,480 lb	77,120 lb
Residential Packer Trucks SWMD	696,840 lb	885,840 lb	788,660 lb	763,860 lb	733,860 lb
Grand Total:	3,023,960 lb	3,536,580 lb	3,219,540 lb	3,204,760 lb	2,970,800 lb
Weekly Tons of MSW	1,512	1,768	1,610	1,602	1,485
Average Daily Tons of MSW	252	295	268	267	248
Projected Annual Tons of MSW	78,623	91,951	83,708	83,324	77,241
Cover Material-DPW	2,456,080 lb	2,813,920 lb	2,252,400 lb	3,023,960 lb	2,033,240 lb
Non DPW Cover Material	70,420 lb	- lb	- lb	- lb	- lb
Total Cover material	2,526,500 lb	2,813,920 lb	2,252,400 lb	3,023,960 lb	2,033,240 lb
Cover % of MSW	84%	80%	70%	94%	68%
Grand Total	5,550,460 lb	6,350,500 lb	5,471,940 lb	6,228,720 lb	5,004,040 lb

Actual Solid Waste Delivered to the Ordot Dump

Weekly June 1, 2009 Forward

Description	<u>12/28 to 1/2</u>	<u>Weekly Average</u>
	<u>Net Wt.</u>	<u>Net Wt.</u>
Commercial Solid Waste (Compacted)	766,040 lb	732,792 lb
Commercial Solid Waste (Non-Compacted)	1,391,860 lb	1,283,153 lb
Agat Transfer Station (Non-Compacted)	41,780 lb	30,441 lb
Dededo Transfer Station (Non-Compacted)	92,640 lb	88,974 lb
Malojloj Transfer Station (Non-Compacted)	43,520 lb	24,345 lb
Ordot Transfer Station (Non-Compacted)	93,320 lb	60,245 lb
Mayors' Solid Waste (Non-Compacted)	52,880 lb	58,012 lb
GovGuam Solid Waste (Non-Compacted)	82,760 lb	80,122 lb
Residential Packer Trucks SWMD	903,240 lb	756,172 lb
Grand Total:	3,468,040 lb	3,114,256 lb
Weekly Tons of MSW	1,734	1,557
Average Daily Tons of MSW	289	260
Projected Annual Tons of MSW	90,169	80,971
Cover Material-DPW	1,259,660 lb	2,375,023 lb
Non DPW Cover Material	20,220 lb	298,179 lb
Total Cover material	1,279,880 lb	2,673,202 lb
Cover % of MSW	37%	86%
Grand Total	4,747,920 lb	5,787,458 lb