

PERMITTEES:	PERMIT NUMBER:	LF- 0052-13
OWNER:	DATE OF ISSUE:	Draft – December 2013
County of Kauai	EXPIRATION DATE:	5Y-1d from date
OPERATOR:	LATITUDE/LONGITUDE:	21° 59'N/159°45'W
Waste Management of Hawaii	PROJECT:	Kekaha MSW Landfill
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DRAFT SOLID WASTE MANAGEMENT PERMIT

This solid waste management permit renewal and modification is issued under the provisions of Chapters 342H, “*Solid Waste Pollution*” Hawaii Revised Statutes (HRS), and Title 11, Chapter 58.1, “*Solid Waste Management Control*” Hawaii Administrative Rules (HAR). The above-named permittees are hereby authorized to construct and to operate the facility shown on the application and additional submittals, and other documents on file with the Department of Health as follows:

To Construct: A vertical expansion to the Kekaha Municipal Solid Waste Landfill (KLF), over Phase II. The new maximum height of Phase II will be no greater than 120 feet above mean sea level (msl), resulting in approximately 662,000 cubic yards of additional waste filling volume. The vertical expansion does not change the existing waste footprint of the KLF.

The KLF is situated on approximately 98 acres of land and is comprised of two distinct refuse fill areas identified as Phase I, approximately 33 acres, and Phase II, approximately 38.5 acres (inclusive of Cell 1). Phase I ceased operations on October 8, 1993. Phase I has no liner system beneath the refuse as there was no requirement for one at that time. Phase II began operations on October 9, 1993 with the closure of Phase I. Phase II was constructed to meet the Resource Conservation and Recovery Act (RCRA) Subtitle D criteria and is currently the only active, permitted MSW landfill on Kauai.

KLF Phase II was initially permitted for a maximum elevation of 37 feet msl. However, to accommodate waste generated by Hurricane Iniki in 1992, a vertical expansion was approved in 1998 raising the maximum fill elevation to 60 feet msl. A second vertical expansion was subsequently approved in 2005 to raise the maximum fill level to 85 feet msl, and a lateral expansion for Cell 1 was approved in 2010.

To Operate: A municipal solid waste (MSW) landfill, consisting of the existing Phase II, approximately 32 acres and Cell 1, approximately 6.4 acres, for a total of 38.4 acres. The operation will include a materials drop-off facility (MDOF). The MSW landfill and MDOF shall be operated with the approved environmental controls and monitoring systems. The existing storm water management system, which uses perimeter berms on the landfill top deck and storm water “letdowns” (locations where drainage channels have been lined with rocks to convey runoff from the steep side slopes of the landfill to minimize erosion of the cover), directs water to infiltration ditches on the northeast of the existing Phase II, and on the northwest side of Cell 1, and which ultimately lead to the infiltration basin.

Immediately on the east side of the relocated evaporation pond is the Materials Drop-off Facility (MDOF) for public drop-offs of green waste, recyclables, residential municipal solid waste, tires, and white goods. A used oil drop-off area is located in the maintenance shop.

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Recyclable materials include cardboard, newspaper, glass, aluminum cans, plastic bottles (#1 and #2), and mixed paper. The use of the Phase I landfill area for storage and processing of green waste is not included in this permit.

The peak daily disposal rate shall not exceed 600 tons per day.

The landfill operator is Waste Management of Hawaii (WMH), and the landfill work force is County employees. Maintenance of the closed Phase I landfill is the responsibility of the County, and is not included as part of this permit.

IN ACCORDANCE WITH: (1) A permit renewal and modification application received on September 3, 2013, and additional information received on September 12, September 27, October 25, November 23, and December 6, 2013; (2) *Engineering Report for Kekaha Landfill Phase II Vertical Expansion* dated August 2013 and prepared by AECOM Technical Services, Inc., (AECOM) (3) *Site Operations Manual, Kekaha MSWLF – Phase II*, August 2013, (4) *Groundwater Monitoring Plan* dated August 2013, (5) *Closure/Post Closure Plan* dated August 2013 and prepared by AECOM, (6) Attachment P-5 and (7) Attachment P-6. All other plans and information submitted as required by this permit and approved by the department are also part of the permit documents. Should there be any discrepancies among the aforementioned documents, HRS 342H and I, HAR 11-58.1 and the conditions of this permit, then solid waste laws, rules and permit conditions shall take precedence.

LOCATED AT: Mile marker 28
Kaumualii Highway (Highway 50)
About 2 miles west of Kekaha, Kauai
TMK: (4) 1-2-002:001

SUBJECT TO: HRS 342H and 342I; HAR 11-58.1; and Part I - Standard Conditions, Part II - Special Conditions, Sections A through I, and Part III – Special Conditions, Material Drop-Off Facility, of this permit.

Acceptance of this permit constitutes an acknowledgement and agreement that the holder will comply with all rules, regulations, and orders of the Department and the conditions precedent to the granting of this permit.

This permit supersedes Solid Waste Management Permit Number LF-0053-09, issued on November 16, 2009, in its entirety.

DRAFT – NO SIGNATURE

For DIRECTOR OF HEALTH
State of Hawaii

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The solid waste management facility is subject to HRS Chapter 342H, *Solid Waste Pollution*, HRS Chapter 342I, *Special Wastes Recycling*, and HAR Chapter 11-58.1, *Solid Waste Management Control*, and the following conditions:

PART I - STANDARD CONDITIONS

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittees and enforceable, pursuant to the authority of HRS §342H. The department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittees, its agents, employees, servants, representatives, contractors, or subcontractors. 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 shall remain valid.

2. This permit:
 - a. shall not in any manner affect the title of the premises upon which the facility is or will be located;
 - b. does not release the permittees from any liability for any loss due to personal injury or property damage caused by, resulting from, or arising out of the design, installation, construction, operation, maintenance, closure, or post-closure of the facility;
 - c. does not release the permittees from compliance with other applicable statutes and regulations of the State of Hawaii or with applicable federal or local laws, regulations, or ordinances;
 - d. in no way implies or suggests that the State of Hawaii, or its officers, agents, or employees assumes any liability, directly or indirectly, for any losses due to personal injury or property damage caused by, resulting from, or arising out of the design, construction, operation or maintenance of the facility; and
 - e. shall not constitute nor be construed to be an approval of the design, construction, operation, maintenance, closure and post-closure of the facility beyond the regulatory requirements mandated by HRS §342H and HAR §11-58.1.

3. Issuance of this permit does not preclude the responsibility of the permittees to obtain any and all necessary approvals and permits from the appropriate federal, state, and local agencies, including zoning clearances, prior to the start of operations.

4. Unless the submitted documents and other information secured by the department from the permittees contain confidential information, such as secret processes or

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methods of manufacture, they shall be made available for inspection by the public (HRS §342H-14). The permittees shall be responsible for identifying, in writing, the specific information asserted to be confidential. The department shall review the assertion made by the permittees and determine if confidentiality is indeed warranted.

5. This permit is valid only for the specific processes and operations applied for and indicated in the submitted application and additional submissions approved by the department. Any unauthorized deviation that affects the facility's design, operations or procedures, or which could threaten human health and the environment, from the submitted application, approved drawings, operations manual, and additional submissions or conditions of this permit may constitute grounds for revocation of this permit, and/or enforcement action by the department. Should there be any discrepancies between the submitted documents and the permit conditions, the permit conditions shall take precedence. A copy of the submitted application and additional submissions shall be maintained at the facility.
6. This permit is non-transferable whether by operation of law or otherwise, either from one location to another, from one solid waste disposal operation to another, or from one person to another without the written approval of the director [HAR §11-58.1-04(e)(2)].
7. This permit shall be kept at or near the construction and operation site for which the permit is issued and shall be available upon request [HAR §11-58.1-04(f)]. A request for a duplicate permit shall be made in writing to the director within ten (10) days after the destruction, loss, or defacement of this permit. A fee of \$50 shall be charged and submitted with the request [HAR §11-58.1-04(h)(3)].
8. The permittees shall at all times properly operate and maintain the facility and systems of treatment, process, and control (and related appurtenances), as applicable to the facility, that are installed or used by the permittees to achieve compliance with the conditions of this permit, as required by department rules. The facility shall be designed, constructed, and equipped in accordance with best practicable technology so as to operate without causing a violation of applicable rules and regulations.
9. Incident Notification Requirements. The permittees shall notify the department, in writing or facsimile, whenever there are incidents such as fire, explosion, or release of regulated material/waste, which could threaten human health or the environment (i.e., air, soil, or surface and subsurface waters). Initial notification may be by phone or fax and reported within eight (8) hours, whenever possible, and no more than twenty-four (24) hours. The notification report shall be completed and submitted by

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an Environmental Compliance Officer or other responsible official within three (3) calendar days for waste disposal facilities, such as landfills and incinerators and shall include:

- 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. date, time, and type of incident (i.e., fire, explosion, release, etc.);
- d. name and quantity of material(s) involved;
- e. the extent of injuries, if any;
- f. an assessment of actual or potential hazards to human health or the environment, where this is applicable;
- g. estimated quantity and disposition of recovered and unrecovered material that resulted from the incident;
- h. evaluation of the circumstances that led to the incident;
- i. steps being taken to reduce, eliminate, and prevent recurrence, including an implementation schedule; and
- j. other information or monitoring as required by the department

Notification requirements for releases only apply to releases of a quantity equal or exceeding the reportable quantity (RQ) listed in HAR §11-451.

10. Noncompliance Notification Requirements. If, for any reason, the permittees does not comply with, or will be unable to comply with, any condition or limitation specified in the permit, the permittees shall notify the department verbally within twenty-four (24) hours followed by a written report within three (3) calendar days for waste disposal facilities, such as landfills and incinerators of the verbal notification. The written report shall be completed and submitted by an Environmental Compliance Officer or other responsible official and contain the following information:

- a. description and cause of noncompliance;
- b. period of noncompliance, including exact dates and times; and, if not corrected, the anticipated duration that the noncompliance is expected to continue; and
- c. steps that will be taken to correct the area of noncompliance;
- d. steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance, including an implementation schedule; and
- e. other information or monitoring as required by the department.

The permittees may be subject to enforcement action by the department, penalties, or revocation of this permit.

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The use of an electronic facsimile device (FAX) for notifications is acceptable. Any data transmission or detailed explanations transmitted shall be accompanied by regular mail submittals. Failure to notify in accordance with this requirement may initiate enforcement action.

11. Monitoring and Recordkeeping Requirements. The permittees shall comply with the following monitoring and recordkeeping requirements:
 - a. Upon request, the permittees shall furnish all records (e.g., transaction reports, disposal receipts, sampling, and testing results) and plans required by the department. The retention period for all records shall be a minimum of five (5) years unless otherwise specified in Standard Conditions, Item 11.b; however, there shall be an indefinite retention period for all records associated with any unresolved enforcement action as determined by the department.
 - b. The permittees 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 recordings of monitoring instrumentation), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The retention period shall be for the life of the facility, through closure and post-closure periods, for waste disposal facilities (such as landfills and incinerators).
 - c. Records of monitoring information, if applicable, shall include:
 - the date, exact location, and time of sampling or measurements;
 - the person responsible for performing the sampling or measurements;
 - the date(s) analyses were performed;
 - the person responsible for performing the analyses;
 - analytical techniques or methods used; and
 - results of such analyses.
12. The permittees shall submit complete and detailed plans and reports on existing solid waste management systems and of any proposed addition to, modification of, or alteration of any such systems that affects the facility's operations or procedures, or which could threaten human health and the environment and contain the information requested by the department in the form prescribed by the department. Any submission for permit modification shall be submitted in accordance with Standard Conditions, Item 13. The plans and reports shall be prepared by a competent person acceptable to the department, and at the expense of the permittees.
13. Should the permittees decide to modify the permit or continue operation of the solid waste facility beyond the expiration date of the permit, the permittees shall submit a

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complete permit modification or renewal application at least one year prior to the modification or the date of permit expiration. Any submission for permit modification does not affect these permit conditions until such modification becomes final in accordance with HAR §11-58.1-04, or as approved by the department.

14. The director may, in accordance with HRS §342H-6, enter and inspect the facility for the purpose of
 - a. investigating an actual or suspected source of solid waste or other pollution;
 - b. ascertaining compliance or noncompliance with any rule, regulation, permit condition, or standard promulgated by the department; and
 - c. conducting tests in connection therewith (including collecting soil, water, air, ash, and any other material or samples).

The permittees, by accepting this permit, specifically agrees to allow authorized department personnel, upon presentation of credentials or other documents as may be required by law, access to the premises. The permittees may conduct testing (including collecting soil, water, air, ash, and any other material or samples) simultaneously.

15. The department may require the permittees to conduct sampling and testing to determine the degree of pollution, if any, from the solid waste facility (including soil, water, air, ash, and any other materials or samples). If contamination is found, the permittees shall appropriately address the situation to protect human health and the environment.
16. When requested by the department, the permittees shall within a reasonable time, as specified by the department, furnish any information required by law, which is needed to determine compliance with the permit. If the permittees becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the department, such facts or information shall be submitted or corrected promptly. Upon the written request of the permittees, the deadline for submission of information may be extended, if the department determines that reasonable justification exists for the extension.
17. If the department determines that the permittees has violated or is violating any provision of HRS §342H, HAR §11-58.1, or these permit conditions, the department may pursue enforcement action in accordance with HRS §342H-7, *Enforcement*; §342H-9, *Penalties*; §342H-10, *Administrative Penalties*; §342H-11, *Injunctive and other relief*, or any other pertinent rules.
18. The department may, on its own motion, modify, suspend, or revoke a permit if, after

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affording the applicant a hearing in accordance with HRS 91, the department determines that any permit condition, rule, or provision of HRS §342H has been violated or that such is in the public interest [HAR §11-58.1-04(d)].

19. If the governor or the director determines that an imminent peril to the public health and safety is, or will be, caused by the disposal of solid waste or any combination of discharges of other waste that requires immediate action, the governor or the director, without a public hearing, may order the permittees to immediately reduce or stop the disposal, discharge, or process, and may take any and all other actions as may be necessary (HRS §342H-8).

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PART II - SPECIAL CONDITIONS**Section A. General Facility Conditions**

1. The County shall construct and operate the facility in accordance with HRS 342H and 342I, HAR §11-58.1, the permit renewal and modification application received on September 3, 2013, (dated August 2013), and additional information received on September 12, September 27, October 25, November 23, and December 6, 2013; approved subsequent submissions, and the conditions of this permit. If there are any discrepancies among the aforementioned documents, HRS, HAR and permit conditions, then solid waste laws, rules and these permit conditions shall take precedence.
2. The County of Kauai shall develop a Master Plan that provides information on future landfill capacity requirements in both numerical and graphical presentations with a minimum projection of 20 years and shall include the waste footprints and service lives of Phase II and future lateral expansion phases and/or future landfills. The Master Plan shall include the proposed Basis of Design, buffer areas, appurtenant and support facilities. The Master Plan shall be submitted within sixty (60) days of issuance of the permit modification. Updates and revisions to the plan shall be submitted at least every two years, with the first update/revision due by will be required every two years, starting July 31, 2014.
3. The height of the MSW landfill shall not exceed 120 feet above mean sea level (msl) at its highest point. The final grades of the MSW landfill shall be in accordance with Drawing No. 2 of the Engineering Report, August 2013.
4. No construction of additional disposal cells or modification of the lateral or vertical extent of disposal cells shall occur without written approval by the Department. Any modification requests shall be submitted in accordance with Standard Conditions, Item 13, at least one (1) year prior to commencement of the proposed construction or modification. The construction and design plans shall be prepared and certified by a professional engineer, with at least five (5) years experience in designing landfills, and registered in the State of Hawaii.
5. A permanent sign shall be posted at the facility entrance identifying the facility, the hours and days of operation, and the name and address of the operator, a telephone number and other pertinent information.
6. The permittees may only operate the facility during the normal operating hours of 8:00 a.m. to 4:00 p.m., seven days per week, for acceptance and disposal of waste at the MSW landfill; and collection of waste and recyclables at the MDOF. In the

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event that the facility proposes any waste acceptance and disposal outside normal operating hours, the permittees shall notify the department, in writing, of this event. The notification shall be provided at least twenty-four (24) hours in advance of the event. If the event is unanticipated, the permittees shall provide verbal notice of the event within four (4) hours and written notification within eight (8) hours of commencement of the event. A facsimile submission of the notification is acceptable. The written notification shall specify the affected dates and times, the nature and reason for the extended operations, identification of any considerations associated with the extended operations, and controls/procedures that will be implemented to mitigate any adverse impacts of the extended operations.

7. An all-weather access road shall be maintained into and out of the facility site, through the entrance facility and to and from the working area of the landfill.
8. The permittees are responsible for providing measures to control public access in accordance with HAR 11-58.1-15(f). The permittees shall provide and maintain controlled access to the facility in the form of fences and gates along the site perimeter. All gates shall be kept locked when an attendant is not on duty.
9. Scavenging at the facility by the general public is prohibited.
10. The facility shall have a Site Manager, and an Environmental Compliance Manager who shall be knowledgeable of state solid waste laws, regulations, these permit conditions and the permit application components including, but not limited to, the August 2013 Site Operations Manual and approved subsequent submissions. The Environmental Compliance Manager may be a corporate employee based outside of the County. The permittees shall submit written updates in the event that there are any changes in the responsibilities or identification of the Site Manager or the Environmental Compliance Officer.
11. Landfill operations shall be supervised at all times by an individual, who has successfully completed a Manager of Landfill Operations (MOLO) training course conducted by the Solid Waste Association of North America, or a DOH-approved alternative. MOLO training certifications or equivalent shall be current. Records of such training shall be placed in the operating record.
12. The permittees shall comply with the financial assurance requirements in HAR 11-58.1-18 for closure of the landfill, post-closure care, and corrective action, if required.
 - a. The permittees shall include a copy of the detailed written estimates in the Annual Operating Report, required in Special Conditions, Section I of this permit.

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- b. The permittees shall include documentation of financial assurance in the Annual Operating Report, required by Special Conditions, Section I of this permit.
13. Emergency Action Plan. The permittees shall implement the Emergency Action Plan, provided as Section I, Part E of the August 2013 Site Operations Manual, and approved subsequent submissions.
- a. The permittees shall provide verbal and written notification of incidents to the department, in accordance with Standard Conditions, Item 9 of this permit. Incidents shall also include suspected subsurface fires, and be reported based on any of the notification criteria listed in the Operations Manual.
 - b. The permittees shall implement the Emergency Action Plan for the following situations:
 - i. Fires (including surface, nearby, incoming waste loads, vehicle/equipment, subsurface, etc.),
 - ii. Severe storm (2-year, 24- hour storm or greater, or continued rainy conditions over duration of 14 days), including hurricanes.
 - iii. Earthquakes and tsunamis,
 - iv. Hazardous material spills at or above the Reportable Quantity,
 - v. Other emergency procedures, and trigger levels, as provided in the Emergency Action Plan.
 - c. The permittees shall assess, monitor, and maintain the landfill after emergencies that may affect the integrity of the landfill, including, but not limited to, the liner system, leachate collection and control system, surface water management system, and any other affected portions of the landfill. If the acceptance and disposal of waste ceases, the permittees shall submit a written evaluation of whether waste acceptance can resume. The evaluation shall be prepared by a professional engineer registered in the State of Hawaii and the District Manager, certifying that the landfill and its associated environmental controls are functional, equivalent or better than required, and that operation of the landfill will not cause a violation of environmental regulations. The evaluation shall also include a description of any findings and corrective actions. The facility may resume acceptance and disposal of waste upon submission of this evaluation to the department. The department may require additional assessment, monitoring, and corrective actions, as necessary to address the event.

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Section B. Construction and Maintenance of Phase II

1. The permittees shall maintain the integrity of the liner system and leachate collection and control system as designed and constructed, or implement equivalent or better alternative environmental controls, as approved by the department.
 - a. Existing Phase II cells, installed in accordance with Harding Lawson Associates drawing, *Kekaha Sanitary Landfill Phase 2*, dated March 1993. The existing Phase II is divided into fourteen (14) cells, each of which is 100 feet wide and 800 to 1,110 feet long. Each cell is graded at a slope of 3% toward a central trench for leachate collection. The trenches contain drainage gravel and 8-inch diameter perforated HDPE pipes. Each pipe drains to a leachate collection manhole located outside the liner cell perimeter. Leachate, collecting in the manholes, flow by gravity to two pump stations, from which it is pumped through 6-inch diameter HDPE force main pipes to the leachate evaporation pond. The base liner system consists of the following components (bottom to top):
 - i. 6-inch thick granular foundation layer (sideslopes only)
 - ii. Prepared granular subbase grade.
 - iii. Geosynthetic Clay Liner (GCL) consisting of a smooth 20-mil high-density polyethylene (HDPE) geomembrane with an adhered bentonite powder layer on one side (Gundseal). The GCL was installed with the smooth side in direct contact with the granular subbase base grade and foundation layer on sideslope, and with the bentonite component side up.
 - iv. Single-sided textured 60-mil HDPE geomembrane (textured side down) against the bentonite component of the GCL on the sideslope.
 - v. Smooth 60-mil HDPE geomembrane against bentonite component of the GCL on the base.
 - vi. 24-inch sand drainage layer (base and side slope).
 - b. For Cell 1, the base liner was constructed in accordance with the Engineering Report, January 2009. The base liner consists of the following layers (from bottom to top):
 - i. Prepared subbase grade.
 - ii. The base liner has a 60 mil HDPE geomembrane, textured on both sides, installed over the prepared subbase grade.
 - iii. A geosynthetic clay liner (GCL) composite product consisting of bentonite powder/granules encapsulated between a carrier non-woven geotextile and a cover of non-woven geotextile, needle punched for additional strength.
 - iv. A 60 mil HDPE geomembrane, textured on both sides.

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- v. A 16 oz/yd² non-woven cushion geotextile
 - vi. The drainage layer consisting of 12 inches of gravel, with a maximum rock size of 1.5-inches, with a permeability of 3×10^{-1} cm/sec or greater, and containing less than 12 percent calcium.
 - vii. A 6 oz/yd² separator geotextile.
 - viii. The operations layer of 24 inches of gravel with less than 12 percent calcium.
 - ix. The side slope liner consists of a layer of internally reinforced geosynthetic clay liner sandwiched between two 60-mil HDPE geomembranes textured on both sides. The geotextiles, 12-inch drainage, and 24-inch operations layers on the base liner shall extend up the entire length of the side slopes.
- c. For the Leachate Evaporation Pond, the base liner system design was constructed in accordance with the Engineering Report, January 2009. The lowest base liner elevation is at least 5 feet above the high ground water level. The base liner system for the Evaporation Pond was constructed as follows (from bottom to top).
- i. Prepared subbase grade.
 - ii. 60-mil HDPE geomembrane, textured on both sides.
 - iii. A geosynthetic clay liner (GCL) composite product consisting of a bentonite powder/granules encapsulated between a carrier woven geotextile and a cover of woven geotextile, which are needle punched.
 - iv. 60-mil HDPE geomembrane, textured on both sides.
 - v. GCL composite, same as c.iii above.
 - vi. 60-mil HDPE geomembrane, textured on both sides.
 - vii. 16-oz/sq yd non-woven cushion geotextile layer.
 - viii. 12 inch granular operations layer with maximum rock size of 3/4 inch and less than 12 percent calcium.
 - ix. 6 oz/sq yd non-woven separator textile layer.
 - x. 2-inch thick granular protection layer.
 - xi. On the sideslopes, the liner will follow the base liner through Item 1.c.vi above. On top of which, is a 16 oz./sq yd nonwoven cushion geotextile and a geoweb filled with granular materials.
2. **Buffer.** MSW disposal activities shall not occur within a buffer zone comprised of a minimum of:
- a. 52 feet from the edge of waste to the property line along the west/northwest edge of Cell 1. This would provide an approximate 82-foot distance from the closest edge of waste of Cell 1 to the nearest agricultural activity. This distance is comprised of about 52 feet from the edge of waste to the landfill

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property line, and 30 feet from the landfill property line to the far edge of a federal roadway right-of-way for the Lae-O-Kokole Lighthouse.

- b. 300 feet from edge of waste to the property line along Kaumualii Highway.
 - c. 1000 feet from the property line of any future urban area.
3. The permittees shall submit any significant proposed changes affecting the design or structural integrity of the installed liner system or leachate collection system, in writing, at least one hundred eighty (180) days prior to commencement of the proposed change. Regular maintenance procedures, such as replacing broken valves with a similar valve, do not require department approval. Any proposed changes shall be comparable or improved in its capability to protect human health and the environment. At a minimum, the written proposal shall include:
- a. Identification of affected cells or areas;
 - b. Reason for the proposed change;
 - c. Engineering design;
 - d. Point of Compliance Evaluation;
 - e. Implementation schedule; and
 - f. Other pertinent information.

The department may also require additional information to evaluate the request. If the proposed changes require a modification to this permit, a modification application shall be submitted in accordance with Standard Conditions, Item 13.

4. Installation of any geosynthetic liner shall be performed by an experienced 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 QA/QC landfill inspector with at least five (5) years of experience in landfill CQA responsible to a professional engineer shall observe liner installation and grade elevations. The permittee(s) shall notify the DOH, in writing, five (5) days prior to any liner installation work.
5. The permittees shall install and maintain grade survey control markers to delineate the boundaries and elevations of the MSW landfill areas, in sufficient number to demonstrate compliance with permitted grades.

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Section C. Acceptance Criteria

1. The permittees are authorized to accept for disposal, solid wastes, as defined in HAR 11-58.1-03, except unacceptable waste listed under Special Conditions, Section C, Item 2.h.
2. The permittees shall implement the Operations Plan dated August 2013, Waste Acceptance/Hazardous Waste Exclusion Program dated August 2013, approved subsequent submissions, and the following conditions.
 - a. The permittees shall screen waste, prevent unacceptable waste from entering the facility, and remove unacceptable waste if it enters the facility.
 - b. The permittees shall post a sign on the property that lists unacceptable wastes.
 - c. The permittees shall conduct random visual surveillance of mixed commercial loads (not inclusive of loads known to only contain single source-separated materials, such as sludge), at least once per day, to spot check for unacceptable wastes. The permittees shall document findings on the Load Check Data Sheet.
 - d. The equipment operators and spotters at the active workface shall visually screen the contents of each load and remove unacceptable waste.
 - e. If unacceptable waste is observed, the permittees shall reject the load. If the waste has been unloaded, the permittees shall separate the unacceptable waste, move it away from the active workface, and manage it in accordance with Special Conditions, Section C, Item 3.
 - f. Equipment operators and spotters shall receive training on visual surveillance and unacceptable waste handling procedures set forth in the Operations Plan. Training shall be attended at least once per year, or more frequently as needed to ensure compliance with the facility procedures.
 - g. The permittees shall maintain records of random inspections on the Load Check Data Sheets and personnel training.
 - h. Unacceptable waste is defined as:
 - i. Regulated hazardous waste, as defined in state hazardous waste laws and regulations;
 - ii. Polychlorinated biphenyl (PCB) waste, as defined in 40 CFR Part 761;
 - iii. Untreated infectious waste, excluding infectious waste generated within the household, in accordance with HAR 11-58.1-63;
 - iv. Bulk or noncontainerized liquid waste, except as provided in HAR 11-58.1-15(i);
 - v. Containers holding liquid waste, except as provided in HAR 11-58.1-15(i)(2);

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- vi. Commercial loads containing >25% green waste and household loads containing > 50% green waste, in accordance with HAR 11-58.1-65(b);
 - vii. Scrap automobiles, white goods, and whole motor vehicle tires, in accordance with HAR 11-58.1-65(c);
 - viii. Lead acid batteries, in accordance with HRS 342I;
 - ix. Compressed gas tanks; and
 - x. Other unacceptable wastes listed in the Operations Plan and Waste Acceptance/Hazardous Waste Exclusion Program.
3. If unacceptable waste is identified at the facility, the permittees shall separate the waste, manage, transport, and recycle/dispose of it in accordance with the Operations Plan and applicable laws and rules. Unacceptable waste identified at the facility shall not be disposed of at the facility.
 - a. Unacceptable waste shall also be transported from the facility prior to posing a nuisance, health, or safety concern.
 - b. Unacceptable waste shall be transported to a permitted solid waste management facility allowed to accept the waste, or to an out-of-state recycling/disposal facility.
 - c. The permittees shall maintain a daily log of unacceptable waste turned away from the facility or separated from disposal, including date, hauler, waste type, estimated quantity, and destination.
 - d. The permittees shall notify the Department, in writing, within 24 hours or the next working day of the identification of hazardous or PCB waste. The notification shall include the date and time of incident, origin of the waste, hauler/generator, description and quantity of waste, actions that will be taken to manage the waste at the site, and actions that will be taken to remove the waste from the premises. The permittees shall also provide written notification, including a copy of the associated manifests, within seven (7) days of removal of the waste from the facility.
4. The permittees shall manage and dispose of radioactive waste in accordance with HAR 11-58.1-64.
5. The permittees shall implement the Waste Acceptance/Hazardous Waste Exclusion Program, as provided in Section I, Part B of the Site Operations Manual, the Operations Plan, and approved subsequent submissions.
 - a. The permittees shall pre-approve special wastes, prior to acceptance at the facility.
 - b. The permittees shall maintain written documentation and implement special handling procedures associated with each type of special waste. The

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- procedures shall be based on the physical, chemical or pertinent characteristics of the special waste.
- c. Special waste means any solid waste which, because of its source or physical, chemical, or biological characteristics, require special consideration for its proper processing or disposal, or both, includes, but is not limited to:
- i. Asbestos;
 - ii. Semi-solid wastes including:
 - (1) water separation, car and equipment wash wastes;
 - (2) sewage sludges;
 - (3) underground storage tank and other sludges;
 - iii. Off-specification and outdated products;
 - iv. Baghouse dusts;
 - v. Inorganic filter cakes;
 - vi. Treated infectious waste;
 - vii. Dead animals and offal;
 - viii. Contaminated Materials including:
 - (1) Contaminated soils and debris, including: resins and chemical debris; petroleum and other contaminated soils; and petroleum fuels (i.e., used oil, diesel, jet fuel, gasoline) and debris
 - (2) Sandblast grits;
 - (3) Waste that are toxic in nature, such as insecticides, poisons, or radioactive materials (provided that they are not regulated under another authority such as RCRA Subtitle C, TSCA that requires disposal other than at a permitted MSW landfill), and
 - (4) other solid waste, which may be accepted for disposal such as contaminated industrial/commercial waste and non-TSCA regulated PCB waste, provided such materials are not regulated hazardous waste; and
 - ix. Other special waste listed in the Waste Acceptance/Hazardous Waste Exclusion Program; and
 - x. Fresh or frozen uncooked shrimp and other crustaceans.
- d. The permittees shall approve Contaminated Materials (as defined in Special Conditions, Section C, Item 5.c.viii), on a case-by-case basis, prior to acceptance at the facility.
- i. The permittees shall implement procedures for the acceptance of contaminated material specified in Section 5.2.3 of the August 2013 Operations Plan, and approved subsequent submissions. These procedures shall be implemented for all contaminated materials defined in Special Conditions, Section C, Item 5.c.viii.
 - ii. A Notice of Contaminated Material Approval shall be submitted to the Department at the address found in Section I.4 prior to acceptance at

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the facility. The notice shall include approval from both the owner and operator of the facility. The use of facsimile submissions is acceptable. The notice shall include: acceptance date(s), quantity and description of waste, origin of waste, waste profile sheet/approval manifest; proposed management of contaminated material (use as daily cover or disposal as void space fill) and any special management and handling procedures.

- e. All documentation shall be maintained at the facility.

Section D. Provisions Related to the Operation of the Phase II Landfill

1. The permittees shall implement the Site Operations Manual, August 2013, including the August 2013 Operations Plan, and approved subsequent revisions. The Department may periodically require revisions to the Site Operations Manual. The contents of the Site Operations Manual shall address permit requirements and be implemented to ensure compliance. Any significant changes to the Site Operations Manual require approval from the Department. Depending on the scope of the change, a permit modification may also be required. If there are discrepancies between the Site Operations Manual and these permit conditions, the permit conditions take precedence.
2. The average acceptance rate of the landfill is approximately 200 tons per day. The peak daily disposal rate shall not exceed 600 tons per day.
3. **User Population.** The permittees shall maintain a list of the types of users for operator reference and regulatory review. In the event that a change is required for the user population or the screening and review process to identify legitimate users, the permittees shall submit a written update of such change. The written update shall propose adjustments to the screening and review process, as appropriate to respond to the changes in the user population.
4. **Air Criteria.** The permittees are responsible for obtaining permits and maintaining compliance with any state or federal Clean Air regulations. Open burning of solid waste, except for debris from emergency cleanup operations, is prohibited. Open burning of debris from emergency cleanup operations shall not commence without prior approval from the Department.
5. **Climatic Information.** Climate information shall be collected on a daily basis and shall include information on daily rainfall, solar radiation, evaporation, wind speed and direction, humidity, temperature, and other meteorological data, as applicable, for use in modeling evapotranspiration and leachate generation with the HELP

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Model at the landfill and evaluating litter/odor control. The permittees shall minimize any weather equipment downtimes. In the event that the equipment is not operational, the permittees shall maintain a record of the affected date(s), reason, and actions taken. Data shall be provided to the department upon request.

6. **Program for Regular Training.** The permittees shall provide training to landfill operators annually, or more frequently, as needed, to ensure that the operators are familiar with the Site Operations Manual and these permit conditions. Training shall be conducted by a Site Manager or Operations Manager. Records of training shall be maintained.
7. **Queuing.** The permittees shall provide adequate on-site queuing for waste delivery vehicles at the scalehouse area. The permittees shall also make reasonable best efforts to prevent waste vehicles from idling on the highway.
8. **Mud and Dust Prevention Program.** The permittees shall provide measures for minimizing the tracking of mud onto public roads, and the generation of dust on site.
 - a. The mud prevention measures shall include the installation and maintenance of wet weather pads and access routes constructed of material (such as cold plane material or asphalt/concrete rubble) that will minimize the exposure of excessive muddy conditions. A wet weather deck shall be present to allow for safe disposal of MSW during wet weather or muddy conditions. If mud is tracked offsite, the permittees shall clean up the tracked mud off the property and implement additional mud prevention measures. Possible measures that may be implemented include: rumble strips, drive-through tire wash, and/or wash pad.
 - b. The permittees shall inform drivers/operators of non-household vehicles that their loads should be covered prior to entering the facility.
 - c. The dust prevention measures shall include, but are not limited to, applying water spray to roads and active workface throughout the day, as needed to control dust. The permittees shall also prevent dust from inactive areas.
 - d. If measures do not adequately minimize the tracking of mud on to public roads or generation of dust from vehicular traffic onsite, the permittees shall implement additional mud prevention and dust control measures.
9. **Disease Vector Control.** The permittees shall prevent or control on-site populations of disease vectors, including rodents, insects and birds.

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- a. A monthly Vector Control Report shall be completed and placed in the operating record to document the following:
 - i. Results of a monthly inspection of the landfill documenting the presence or absence of flies and other insects, rodents and birds.
 - ii. Summary of vector abatement activities.
 - b. If vector control measures are not adequate, the permittees shall implement additional vector control measures.
 - c. Special measures shall be taken to prevent birds from alighting at the workface during delivery and disposal of loads of fresh or frozen uncooked shrimp and other crustaceans. Such measures may include producing noise, deploying balloons and/or having active equipment guard the load.
10. **Litter Control.** The permittees shall confine litter to the working face area and prevent litter from leaving the facility. The permittees shall implement litter control measures as delineated in the Operations Plan and these conditions. During the course of the working day of operation, all windblown material shall be collected and be properly disposed. At a minimum, the collection measures shall include:
- a. The use of litter screens/fences within 100 yards downwind of the active workface (primary fencing).
 - b. The use of additional temporary litter screens/fences in secondary control positions at the workface area in places where they will not hinder traffic control.
 - c. The presence of a truck clean-out area near the active workface, with litter screens/fences and disposal receptacles for truck clean-out. If the truck clean-out area is within 100 feet of a downwind primary fencing area, additional screens/fences shall only be required if the primary and secondary fencing areas are inadequate.
 - d. Cleaning of litter screens/fences (primary, secondary, and truck clean-out area screens/fences) throughout the day. At the end of the operating day, all litter shall be removed from all litter screen/fences.
 - e. Additional litter cleanup of all impacted areas in the event of a major windstorm or other incident in which litter escapes the normal litter containment systems.

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- f. Documentation of the number of personnel picking up litter, number of bags collected, and maximum wind speed for each day.
 - g. If litter control measures are not adequate, the permittees shall implement additional litter control measures.
11. **Temporary Storage.** Stockpiled materials within the landfill waste boundary shall be limited to cover material, gravel for roads/wet weather areas, and landfill equipment, except as otherwise approved by the department. The volume of material storage stockpiles shall not exceed a limit of 30 days capacity. If temporary storage exceeds or is anticipated to exceed 30 days, the permittees shall construct temporary berms or implement other measures to prevent erosion of the stored material and allow for proper surface water flow.
12. The permittees shall provide adequate equipment and personnel to operate the MSW landfill facility, including provisions for back-up personnel and equipment. A minimum of one bulldozer, one compactor, one water truck, and one traffic controller shall be operating at the working face, unless otherwise approved by the Department. The traffic controller and bulldozer operator may be the same person.
13. Operators shall routinely clean the tracks/wheels at the working face using shovel/dry methodology. However, if water is needed, cleaning shall be at the workface and the amount of water used shall be limited to an amount that would otherwise be used for dust control and not cause infiltration into the waste layer.
14. The permittees shall implement the Asbestos Management and Disposal Plan, August 2013, and approved subsequent submissions. Compliance with the plan does not preclude compliance with other applicable statutes, regulations, and rules. The permittees shall document the quantity, type, and location of asbestos disposed of in the MSW landfill. Disposal locations shall be recorded with GPS coordinates. The permittees shall maintain records on the amount and location of asbestos disposal.
15. Loads of treated medical waste shall be placed in a trench/pit excavated within waste that was placed on the same day. Loads of treated medical waste shall be immediately covered with a minimum of two (2) feet of MSW and compacted.
16. Loads of dead animals, offal (hides, intestines and other waste from slaughtered animals) and fresh or frozen uncooked shrimp and other crustaceans shall be placed in trench/pit areas, excavated within waste that was placed on the same day, and shall be immediately covered with a minimum of two (2) feet of MSW or soil and compacted. The thickness of MSW shall be increased or additional soil shall be

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used, as needed to minimize odors. Odor neutralizers and soil cover shall be used, as needed to minimize odors. Prior to acceptance, uncooked shrimp and other crustaceans shall also be containerized and double-bagged.

17. The Odor Control Program in Section 6.4 of the Operations Plan shall be implemented:
 - a. Odorous loads shall be placed in trench/pit areas, excavated within waste that was placed on the same day and known to contain no odorous special wastes. The pit will be large enough to contain approximately twice the volume of the anticipated odorous load.
 - b. The odorous load shall be immediately covered with a minimum of two (2) feet of MSW or soils and compacted. The thickness of MSW shall be increased or additional soil shall be used, as needed to minimize the odor.
 - c. Daily cover soil will be placed and compacted above the solid waste. Odor neutralizers and added soil cover shall be used, as needed to minimize odors.
 - d. If odor control measures are not adequate, the permittees shall implement additional odor control measures and the Department may require that additional measure be implemented.

18. The following controls shall apply to the operations with contaminated materials (as defined in Special Conditions, Section C, Item 5.c.viii):
 - a. The permittees shall ensure that contaminated materials are removed from the truck during disposal and excess amounts of contaminated materials are not transported from the site.
 - b. The permittees shall implement appropriate dust control measures, such as water sprays and barriers, containerization, or restricting disposal to only non-windy conditions to adequately control dust and the scattering of contaminants during placement of contaminated material. The selection of dust/contaminant control measures shall be determined based on operations, the type of waste, and type and concentration of contaminants. The permittees shall also determine whether air monitoring is necessary for the specific disposal. The control measures and procedures for dust control and air monitoring, if applicable, shall be specified in the Contaminated Materials Notification.

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- c. The permittees shall document the special disposal procedures implemented for the contaminated material. Special disposal procedures may include the use of isolation of the material by the use of synthetic or soil barriers or containers.
19. Contaminated soil with contaminant concentrations below current DOH, Environmental Action levels for Direct Exposure in Industrial Setting may be used as daily cover, provided that the daily cover shall not be exposed for more than 24 hours.
 20. Contaminated soil with contaminant concentrations greater than DOH Environmental Action Levels in Residential Setting shall not be used as intermediate or final cover.
 21. The permittees shall place daily cover on the disposed solid waste at the end of each workday, or at more frequent intervals if necessary, to control disease vectors, fires, odors, blowing litter, and scavenging.
 22. The daily cover material shall be comprised of a minimum of six inches of earthen material or an alternative daily cover, and shall leave no exposed waste. Of primary preference, earthen material shall be soil. The permittees shall maintain a daily log, including the date, volume, and type of material used as daily cover.
 23. The permittees may submit a written proposal to request the use of an alternative daily cover (ADC), comprised of alternative materials of an alternative thickness (other than at least six inches of earthen material).
 - a. The request shall include ADC specifications, associated operational procedures, an assessment of whether the alternative material and thickness can control disease vectors, fires, odors, blowing litter, and scavenging without presenting a threat to human health and the environment, and any other pertinent information.
 - b. The use of ADC is limited to daily cover use.
 - c. The permittees shall obtain Department approval, in writing, prior to the commencement of the demonstration project.
 - d. The use of ADC shall be evaluated in demonstration projects. The demonstration project shall be performed in 6-month increments to determine whether the ADC and its thickness can control disease vectors, fires, odors, nuisance, litter and scavenging without presenting a threat to human health and the environment.
 - e. The permittees shall report the performance of the ADC at the end of the demonstration period, including an evaluation of whether the ADC is appropriate for use at the facility, and successful operational procedures.

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- f. The permittees shall obtain Department approval, in writing, prior to commencement of continued use of ADC beyond the demonstration period. The Department may impose conditions on the use of ADC. Those conditions shall become part of this permit.
 - g. The demonstration period or the approved use of an ADC may be rescinded or cancelled by either the Department or Operator at anytime without cause.
24. In accordance with the Department's letter dated January 24, 1995, the Kekaha Landfill is approved to use tarps as ADC. The tarps shall be Griffolyn TX1200 or equal (10 mil thickness with nylon scrim reinforcement). The tarps may only be used under the following conditions:
- a. The area where ADC is used shall be covered with waste or soil daily cover within twenty-four (24) hours after initial ADC placement.
 - b. The ADC placement is limited to 100 feet x 100 feet (approximately 3 tarps). The areas that are not covered with ADC shall be covered with at least 6-inches of compacted daily soil cover.
 - c. An intermediate cell construction method shall be used, with the intermediate cells being limited to 2,000 tons. The approximate dimensions of a 2,000 ton intermediate cell at the Kekaha Landfill are to be 100 feet by 100 feet by 10 feet high. Once the intermediate cell is completed, all faces of the cell shall receive a compacted six-inch layer of soil.
 - d. Additional soil to 12-inches thick shall be added to the six-inch cover material for all-weather haul roads, at the tipping pad, and areas needing intermediate cover.
 - e. Intermediate cell construction soil shall use a fine grain, clay type soil.
25. The permittees shall implement a Daily Cover Monitoring Verification Program as follows:
- a. The permittees shall take digital photos of the active workforce at the middle and end of each day (Monday through Sunday), from the same perspective, to document the placement and thickness of daily cover. Digital photo records shall be maintained at the facility and submitted to the Department via email by noon on the following business day, with cell location information provided in photographs and in emails.
 - b. The permittees shall record the following quantitative items on a daily basis:

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- i. Volume of waste disposed,
 - ii. Cell geometry,
 - iii. Volume and type of daily cover used.
26. The permittees shall cover all inactive MSW areas with intermediate cover. Inactive waste areas are areas that do not receive waste (MSW) within a 30-day period.
 27. The permittees shall cover any area receiving vehicular traffic with intermediate cover, regardless of the time period since last receiving waste.
 28. Intermediate cover shall be a minimum of 12 inches of earthen material (may include six inches of soil daily cover). Particle size shall be adequate to minimize infiltration and direct stormwater to collection systems.
 29. Intermediate cover shall be inspected on a regular basis, at least once per month, and shall be addressed as issues are identified, such as repairs for erosion and cracking. The permittees shall maintain a log of inspections, findings, and corrective actions, if needed. The Department may require that intermediate slopes be vegetated or measures be taken to control dust.
 30. The permittees shall cease acceptance and disposal of waste in high wind conditions, as necessary for safety and environmental compliance and as determined by the foreman and Site Manager or Environmental Compliance Officer. At a minimum, in the event of sustained winds (over a two minute period), at or exceeding 40 mph at the active workplace, the permittees shall stop disposal operations and proceed with placement of daily cover. The permittees shall maintain a log of such events, including the date, time of shutdown, and associated wind speed.
 31. Permittees shall stop accepting waste when the landfill has reached its design capacity or is terminated by any land use permits, whichever comes first, and begin closure actions as delineated in Part II, Special Conditions, Section H.

Section E. Surface Water Management

1. The permittees shall design, construct, and maintain a surface water run-on and run-off control system in accordance with HAR 11-58.1-15(g), throughout the life of the landfill and through post-closure.
2. The surface water system is generally depicted in Section 5 of the Engineering Report, August 2013, and as shown on Engineering Report Drawing Number 5, and approved subsequent submitted documents. The surface water management system

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consists of storm water conveyance that transfers surface water to infiltration ditches and to an infiltration basin on the northeast corner of the facility. Storm water shall not come into contact with the geosynthetic clay liner in the landfill and evaporation pond. If the design is insufficient to comply with the conditions of this permit, proposed modifications shall be submitted to the department and implemented.

3. Stormwater that comes in contact with solid waste shall be managed and disposed of as leachate.
4. The conditions of this permit do not preclude compliance with any other applicable federal, state, or local requirements including water quality and surface water discharge regulations.
5. The Surface Water Management Plan as delineated in Section V of the Site Operations Manual shall be updated annually and filed with the Department by September 1 of each year. It shall contain the following information:
 - a. Report of an annual inspection of surface water management features and facilities, together with a description of required maintenance and changes, which shall be completed by September 1 of each year;
 - b. Updated drawings showing current topography of the landfill, surface water drainage paths and conveyances, and drainage system modifications planned for the next year in response to waste filling;
 - c. All areas with intermediate cover shall be graded to direct storm water away from the workface and towards the storm water collection system;
 - d. Engineering calculations documenting the capability of the surface water management system to comply with the run-on and run-off requirements listed under Special Conditions, Section E, Item 1. Top deck areas shall have minimum slope of 3% to promote drainage. Side-slopes shall not exceed 3.5 horizontal to 1 vertical (final slope design);
 - e. Any updates to the Storm Water Pollution Control Plan or Spill Prevention, Control, and Countermeasures (SPCC) Plan prepared pursuant to federal requirements under the Clean Water Act.

Section F. Explosive Gases Control

1. The permittees shall implement the *Perimeter Gas Monitoring Plan, Kekaha Landfill Phase II*, prepared by AECOM Technical Services, Inc., dated August 2013. The

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permittees shall comply with HAR 11-58.1-15(d), which includes the requirement that the permittees must ensure that:

- a. The concentration of methane gas generated by the facility does not exceed twenty-five percent of the lower explosive limit for methane in facility structures (excluding gas control or recovery system components); and
 - b. The concentration of methane gas does not exceed the lower explosive limit for methane at the facility property boundary. The lower explosive limit for methane is 5 percent by volume.
2. As delineated in the Perimeter Gas Monitoring Plan, dated August 2013, at a minimum, the permittees shall monitor the concentration of gases, including oxygen, methane and carbon dioxide. The permittees shall monitor the concentration of the gases in facility structures, including temporary structures, and at the property boundary in accordance with the Perimeter Gas Monitoring Plan, or other frequency as approved by the department. If an exceedance is identified, the permittees may conduct a verification monitoring event, provided that the verification monitoring is conducted within one (1) hour of the initially detected exceedance. If exceedances or other anomalous condition is identified, the department may increase the frequency of monitoring events.
 3. The permittees shall inspect and maintain the gas monitoring probes. In the event that a probe is unusable, the permittees shall repair the probe or install a new probe prior to the next monitoring event.
 - a. If the probe is repaired, submit documentation to the department indicating the reason for repair, type of repairs completed, and evaluations performed to ensure the probe is acceptable for use.
 - b. If the probe is replaced:
 - i. The permittees shall update the Site Specific Gas Monitoring Plan implemented for Phase II to show the new probe locations and identification numbers within thirty (30) days. The update shall also document the reason for replacing the probe.
 - ii. The permittees shall submit an installation report for the new probe within sixty (60) days of completion. The report shall include geologic logs for each probe location, survey locations, elevations of probes, and as-built drawings of each monitoring probe.
 - iii. The permittees shall abandon the unusable probe, and submit associated documentation.

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4. The permittees shall ensure that the field meters are factory calibrated in accordance with manufacturer's specifications. The permittees shall also field calibrate the meters prior to each monitoring event. The permittees shall conduct monitoring events only with equipment that has been properly calibrated and maintained.
5. The permittees shall submit a report with results within sixty (60) days of each monitoring event. The results shall include the date and time, gas concentrations by volume, barometric pressure, site conditions, name of personnel conducting the monitoring, description of equipment and calibration results, description of monitoring procedure, and identification of any procedures or observations outside of normal conditions.
6. If combustible gas concentrations exceed the limits in Special Conditions, Section F, Item 1, and verification monitoring is not performed within one (1) hour of the initial exceedance or verification monitoring confirms the initial exceedance, the permittees shall perform the following.
 - a. Immediately take all necessary steps to ensure protection of human health,
 - b. Immediately notify the Department of the exceedance,
 - c. Within seven (7) days of detection, place in the operating record and submit to the Department, methane gas levels detected and a description of the steps taken to protect human health,
 - d. Within sixty (60) days of detection, prepare and implement a remediation plan for the combustible gas releases, place a copy of the plan in the operating record, provide a copy of the plan to the department, and notify the department that the plan has been implemented.
 - e. Within thirty (30) days after the remediation plan has been completed, submit a report to the department documenting the actions taken, additional monitoring results, and plans to prevent future recurrences.
 - f. The department may modify the reporting and implementation schedule, as necessary to protect human health and the environment.

Section G. Leachate Management/Groundwater and Leachate MonitoringLeachate Management and Leachate/Groundwater Monitoring Network

1. The permittees shall implement the Leachate Management Plan, dated August 2013, and approved subsequent submissions.
2. The permittees shall manage any storm water that comes in contact with solid waste as leachate.

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3. The permittees shall manage leachate to prevent any entry into the stormwater collection system and any contact with the public.

4. The permittees shall maintain an elevation control point at the top of casing or other monument in the immediate vicinity of the groundwater monitoring well and leachate manhole/wet well/sump, for the measurement of groundwater/leachate in each monitoring system. The elevation control point shall be surveyed at least once every five years and clearly marked. The permittees shall also maintain a monument, showing benchmark elevation, located in a position off the landfill.

5. The permittees shall inspect, operate, and maintain the leachate management system and evaporation pond, as designed at all times. The leachate management system includes the leachate transmission piping, manholes, wetwells, and pumping stations that deliver leachate from the landfill to the evaporation pond.
 - a. The leachate management system and evaporation pond shall be maintained to be operational in accordance with: Original Phase II leachate collection system: HLA drawing titled *Kekaha Sanitary Landfill Phase 2* and dated March 1993, and as modified by the following, and approved subsequent drawings.
 - i. Cell 1 leachate collection system: *Report of CQA Cell 1 (1A through 1D)*, dated October 18, 2010, and prepared by GeoSyntec Consultants, including red-lined construction drawings.
 - ii. Evaporation Pond: *Report of Construction Quality Assurance for New Leachate Evaporation Pond*, prepared by GeoSyntec Consultants, dated May 25, 2010, including red lined construction drawing numbers 3, 11, 12, 13, 14 and 22, as of May 24, 2010.
 - b. Permittees shall maintain in good working order the pump control system, which automatically turns the pumps on and off and sets off a high level alarm at preset wet well levels to preclude backup of leachate into the cells. The pump settings shall be as follows, or as approved by the department.
 - i. For wet wells #1 and #2, the “on” and “off” levels are 4.5 and 1.5 feet msl, respectively, and the high level alarm is set at 5.5 feet msl. The lowest elevation of the Phase II liner sections is 6.1 feet msl.
 - ii. For Wet Well #3, the pump “on” and “off” levels are at 7.00 and 4.19 feet msl, respectively, and the high level alarm is set at 10.0 feet msl. These level settings are lower than the Cell 1 liner low point of 10.5 feet msl.
 - c. The permittees shall inspect the condition and integrity of the leachate collection system and evaporation pond at least once every per month, and in accordance with the Operations Plan.

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- d. The permittees shall document the results of the inspections and implement corrective actions to address any findings that may compromise the integrity of the system and result in a release.
 - e. If the pump system or any portion of the leachate collection and removal system is inoperable, the permittees shall take immediate steps to rectify the problem and implement contingency measures to comply with remaining conditions of this permit.
6. The permittees shall maintain usable access to all groundwater monitoring wells and leachate manholes/wet wells/sumps. The permittees shall inspect and maintain the integrity of the monitoring wells and manholes/wet wells, and protect them from damage, destruction, or vandalism. If repairs or replacement is necessary to ensure proper management and monitoring, then the permittees shall design and construct the necessary repairs and/or replacements.
- a. Should any of these wells/manholes become damaged, destroyed, or vandalized, the permittees shall notify the Department immediately. The notification shall include pertinent information as to the cause of the destruction, description of measures to replace and/or repairs of the monitoring well/manhole, and actions taken to prevent the recurrence of such problems in the future.
 - b. If a new well/manhole will be constructed, modified or repaired, submit a construction plan to the department prior to commencement of construction. At a minimum, the plan shall include the proposed well location, rationale for the location, well design, and installation procedures. The permittees shall implement the repair/construction upon department approval.
 - c. A Well/Manhole Completion Report shall be sent to the Department within sixty (60) days of any new groundwater well/leachate manhole/wet well construction or repair. At a minimum, the report shall include geologic logs, surveyed location and elevation of the well (including inverts), and as-built drawings.
7. The permittees shall remove leachate from the landfill via each of the leachate wet wells in a manner that does not allow for the long-term back-up of leachate into the transmission piping and/or maintains a maximum one-foot depth of leachate above the lowest invert elevation for cells feeding wet wells. Based on design plans, the leachate levels in the wet wells shall not exceed the following compliance levels, or as approved by the department:

Location	Pipe Invert or Lowest Cell Invert Elevation (ft above MSL)	Compliance Level (ft above MSL)
Wet Well 1	5.61	6.61

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Wet Well 2	5.61	6.61
Wet Well 3	10.5	11.5

Note: Invert elevations for Wet Wells #1 and #2 are from construction drawing by Harding Lawson Associates titled *Kekaha Sanitary Landfill Phase 2* and dated March 1993. The invert elevations for Wet Wells 1 and 2 may be superseded by new CQA Reports, as approved by the department.

8. Evaporation Pond
 - a. Leachate levels in the evaporation pond shall not exceed 6-foot depth, leaving about 2 feet of freeboard.
 - b. The permittees shall remove leachate from the Evaporation Pond in a manner that the leachate level in the Evaporation Pond shall not exceed six-foot depth.
 - c. Leachate levels in the evaporation pond shall be checked at least weekly, except during periods of heavy rainfall, the level shall be checked daily, in accordance with the Operations Plan.
 - d. The permittees shall implement contingency plans as needed to address potential exceedance, in accordance with the Operations Plan.

9. The permittees may transport leachate to an authorized wastewater treatment plant.

10. Leachate Storage, Transport, and Removal
 - a. The permittees shall use an automated pumping system to pump leachate from the wet wells to the Evaporation Pond. The permittees shall maintain the pump control system in good working order to preclude backup of leachate into the single lined transmission lines and/or waste cells from the wet wells and maintain leachate sump compliance depths in Special Conditions, Section G, Item 7. The automated systems shall include an alarm system to alert the permittees to anomalous conditions in the pump or piping system.
 - b. In accordance with the Operations Plan, the permittees shall provide storage tanks to temporarily store excess leachate from the evaporation pond, and haul excess leachate to a local wastewater treatment plant as necessary. The transfer of leachate and temporary storage of leachate shall be conducted with secondary containment measures.

11. Leachate Level Monitoring and Recordkeeping
 - a. The permittees shall use automated monitoring and recordkeeping systems to monitor leachate levels in the wet wells/sumps. The automated systems shall include an alarm system to alert the permittees to anomalous conditions in the wet wells/sumps.

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- i. The permittees shall maintain a log of the status of the leachate collection systems, in accordance with the Operations Plan. The frequency shall be increased to at least once per day during periods of heavy rain and when levels have exceeded compliance levels.
 - ii. The log shall include the date, level of leachate in each wet well/sump, volume of leachate pumped into the Evaporation Pond as measured by the flowmeters, or other approved methods, and name of person conducting the inspection.
- b. Reference elevations at the top of each wet well shall be permanently marked on horizontal surface of access opening to allow the manual measurement of leachate surface elevation from the access hatch opening.
- c. The permittees shall take manual measurements of leachate levels in each wet well/sump at least once per month. If manual measurements are inconsistent with automated readings or other problems are identified with the system that question the accuracy of the automated readings, manual measurements shall be taken daily. The department may increase the frequency of manual measurements.
- d. In the event that any portion of the automated monitoring or recordkeeping systems is under repair, maintenance, or inoperable, the permittees shall take manual measurements at least every other day, or daily if needed, to monitor the leachate levels in the associated wet wells/sumps. Within seven (7) days of triggering the requirement for manual measurements, the permittees shall submit written notification to the department describing the situation, corrective actions, and schedule. The department may increase the frequency of manual measurements. After the repair/maintenance is completed, the permittees shall continue daily measurements for a minimum of three (3) days, and weekly for three (3) weeks to verify that all automated readings are consistent with manual measurements. The permittees shall submit written notification, including documentation, of the three (3)-week verification test, prior to reducing the frequency of manual measurements.
- e. The permittees shall manually monitor the leachate level in the Evaporation Pond in accordance with the Operations Plan.
 - i. The permittees shall maintain a log of the leachate level in the Evaporation Pond.
 - ii. The log shall include the date, leachate level in the Evaporation Pond, and name of person conducting the inspection.

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- f. The permittees shall notify the Department of any exceedances of the leachate compliance levels, in accordance with Standard Conditions, Item 10.

Groundwater and Leachate Monitoring

12. Groundwater and leachate monitoring shall be conducted in accordance with HAR 11-58.1-16, the most recent State of Hawaii Landfill Groundwater Monitoring Guidance Document, and the conditions of this permit.
13. The permittees shall implement the *Groundwater Monitoring Plan Kekaha Landfill Phase II* dated August 2013, approved subsequent submissions, and conditions of this permit. The Department may periodically require revisions to the plan.
14. All sample collection, handling, management, and analysis shall be conducted in accordance with EPA SW-846, *Test Methods for Evaluating Solid Waste*.
15. Each sample shall be properly collected, identified, contained, and preserved. The name and signature of the person who collected the sample shall be included in the records. A chain of custody shall be maintained from the time of sample collection through the final analysis and disposition.
16. Sample analysis shall be conducted by an independent third party with appropriate credentials and performed at the expense of the permittees.
17. Groundwater samples shall be collected and analyzed as follows, or as required or otherwise approved by the department.
 - a. Groundwater samples from existing wells shall be analyzed, on a quarterly basis, for constituents listed in 40 CFR 258, Appendix I, major cations and anions (Mg, Na, Ca, K, Cl, CO₃, SO₄, HCO₃), major leachate indicators (TDS, TOC, total alkalinity, nitrogen-ammonia, Cl, and Fe), COD, nitrate-N, bromide, and field measurements (electrical conductance, pH, temperature, turbidity, and groundwater surface elevation), or as required or otherwise approved by the department.
 - b. Groundwater samples from newly installed wells shall be analyzed on a quarterly basis for the following constituents: constituents listed in 40 CFR 258, Appendix I, major cations and anions (Mg, Na, Ca, K, Cl, CO₃, SO₄, HCO₃), major leachate indicators (TDS, TOC, total alkalinity, nitrogen-ammonia, Cl, Fe), COD, nitrate-N, bromide, and field measurements (electrical conductance, pH, temperature, turbidity, and groundwater surface elevation), or as required or otherwise approved by the department.

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18. Leachate samples shall be collected and analyzed on a semiannual basis, or as required by the department. Leachate samples shall be analyzed for constituents listed in 40 CFR 258, Appendix II, major cations and anions (Mg, Na, Ca, K, Cl, CO₃, SO₄, HCO₃), major leachate indicators (TDS, TOC, total alkalinity, nitrogen-ammonia, Cl, Fe), COD, nitrate-N, bromide, and field measurements (electrical conductance, pH, temperature, and turbidity), or as required or otherwise approved by the department. Individual samples shall be collected and analyzed from Wet Wells 1, 2 and 3.

19. The permittees shall prepare and submit a Groundwater/Leachate Monitoring Report within ninety (90) days of sampling, or other applicable reporting period. At a minimum, the monitoring reports shall include:
 - a. Identification of wells/manholes sampled during the event,
 - b. Sample collection dates and methodology,
 - c. Identification of third party entity that performed the sample analysis,
 - d. Analytical data, including copies of laboratory reports,
 - e. Time-series plots for each detection monitoring parameter (except field measurements) and Piper/Stiff diagrams,
 - f. Comparison of analytical data to drinking water standards and Environmental Action Levels,
 - g. Identification of any deviations from the plan, reason for the deviation, and affect on the sampling results, and
 - h. Statement of whether any detection of VOCs or statistically significant increases was identified in groundwater.

20. In the event of a detection of VOCs above the practical quantitation limit, or a statistically significant increase, the permittees shall comply with the requirements of HAR 11-58.1-16 and the Landfill Groundwater Monitoring Guidance Document.

Section H. Closure and Post-Closure Requirements

1. The permittees shall perform closure and post-closure activities in accordance with HAR §11-58.1-17, approved Closure and Post Closure Care Plan, and these permit conditions.

2. The permittees shall submit closure construction plans and specifications with the notice of intent to close as specified in Special Conditions, Section H, Item 3. The construction plans and specifications shall be prepared and certified by a professional engineer, with at least five (5) years experience in designing landfills, and registered in the State of Hawaii.

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3. The permittees shall provide written notice of intent to close each landfill unit at least ninety (90) days prior to initiating closure activities. The notice of intent shall include a schedule and shall also be placed in the operating record.
4. The permittees shall begin closure activities of each landfill unit after receiving department approval on the closure construction plans and specifications and:
 - a. Within thirty days after the date on which the unit receives the known final receipt of wastes;
 - b. Within one year after the most recent receipt of wastes, if remaining capacity exists and there is a reasonable likelihood of additional waste acceptance; or
 - c. Otherwise as approved by the Department.
5. Soil with contaminant concentrations above DOH Environmental Action Levels for unrestricted use shall not be used in the final cover system, as shown in Drawing 5, Details 1 and 2 of the *Closure/Post-Closure Plan*, prepared by AECOM, dated August 2013.
6. The permittees shall complete closure activities of each unit within one hundred eighty (180) days following the beginning of closure in Special Conditions, Section H, Item 4. The permittees shall retain a professional engineer registered in the State of Hawaii for the supervision of the closure construction quality assurance requirements, and upon the completion, the engineer shall submit a summary report to the Department as to the complete conformity to the plans and specifications as approved. The summary report shall be submitted within sixty (60) days after closure activities are completed. The summary report shall include a certification that the permeability of the final cover system complies with the requirements of HAR 58.1-17. The summary report shall also include a description of closure activities, as-built drawings, surveys of the final cover system, a documented control program of the final cover system construction, quality assurance/quality control testing procedures, laboratory analyses, and engineer's certification that the closure was completed in accordance with the closure plan.
7. At a minimum, the Closure and Post-Closure Plan and the Financial Assurance report shall be revised every five (5) years, or whenever facility plans are updated or changed. This is notwithstanding the requirement to make adjustments for inflation on an annual basis.
8. Within ninety (90) days of completion of closure construction, the permittees shall submit a copy of the notation on the deed to the landfill property in accordance with HAR 11-58.1-17.

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9. The permittees shall inspect and maintain the final cover system, including portions of the final cover system in the case of a phased closure, and other environmental controls associated with the facility on a quarterly basis, or more frequently if necessary or required by the department. If post closure plans are inadequate to maintain the integrity of the final cover system and associated environmental controls, additional measures may be required. The Department may periodically require revisions to the plan.
 - a. The inspections of the final cover system shall include, but are not limited to, an assessment of security control; erosion and erosion damage; cover deformation resulting from settlement, subsidence, or deformation; and run on and runoff control structures.
 - b. The inspections of other environmental controls shall include, but is not limited to, an assessment of the surface water management system, perimeter gas monitoring system, leachate collection and control system, Phase I temperature, gas, liner strain, and waste settlement monitoring systems, and presence of odors, vectors, and litter.
 - c. The permittees shall document findings and implement corrective actions or other procedures, as necessary to maintain the integrity and functionality of the final cover system and environmental controls. The permittees shall submit written notification of any areas requiring attention and any associated corrective actions or procedures performed, within thirty (30) days of the quarterly inspection.
10. The permittees shall operate the surface water management system, perimeter gas management system, leachate collection and control system, and monitoring programs in accordance with this permit. The Department may periodically require revisions to the plans.
11. During closure and post-closure periods, the permittees shall continue to assess the landfill after emergency events such as earthquakes and fires, in accordance with Special Conditions, Section A, Item 13.
12. If portions of the landfill are closed while the remainder of the facility is still operating, the permittees shall continue operating and monitoring the closed sections in accordance with this permit.
13. If the landfill reaches full design capacity based on permitted final grades, permittees shall cease acceptance of waste and begin closure of remaining active portions of the landfill.

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Section I. Recordkeeping and Reporting Requirements

1. The permittees shall maintain records in accordance with HAR 11-58.1-15(j), Standard Conditions, Item 11, and the conditions of this permit. Records shall include the following list and any other recordkeeping requirements set forth in this permit:
 - a. Financial assurance requirements (Special Conditions, Section A, Item 12).
 - b. Training records (Special Conditions, Section A, Item 11; Section C, Item 2; and Section D, Item 6).
 - c. Load Check Data Sheets (Special Conditions, Section C, Item 2).
 - d. Daily log of unacceptable waste (Special Conditions, Section C, Item 3).
 - e. Implementation of Waste Acceptance/Hazardous Waste Exclusion Program (Special Conditions, Section C, Item 5).
 - f. User population (Special Conditions, Section D, Item 3).
 - g. Climatic information (Special Conditions, Section D, Item 5).
 - h. Vector control (Special Conditions, Section D, Item 9).
 - i. Litter control (Special Conditions, Section D, Item 10).
 - j. Asbestos disposal locations (Special Conditions, Section D, Item 14)
 - k. Special disposal procedures for contaminated material (Special Conditions, Section D, Item 18.d).
 - l. Daily cover log (Special Conditions, Section D, Item 22)
 - m. Daily cover monitoring verification program (Special Conditions, Section D, Item 25).
 - n. Monthly monitoring of intermediate cover (Special Conditions, Section D, Item 29).
 - o. Ceasing operations due to wind (Special Conditions, Section D, Item 30).
 - p. Inspection of leachate collection and transfer system (Special Conditions, Section G, Item 5).
 - q. Leachate collection system logs (Special Conditions, Section G, Item 13).
 - r. Revisions to Closure and Post-Closure Plan and Financial Assurance Report (Special Conditions, Section H, Item 7).
 - s. Inspections of final cover system (Special Conditions, Section H, Item 9).

2. The permittees shall comply with the reporting requirements of Standard Condition No. 11, the following list, and any other reporting requirements set forth in this permit:
 - a. Operations outside normal operating hours (Special Conditions, Section A, Item 6).
 - b. Personnel updates (Special Conditions, Section A, Item 10).
 - c. Financial assurance requirements (Special Conditions, Section A, Item 12).
 - d. Incident reporting, including suspected subsurface fires (Special Conditions, Section A, Item 13).

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- e. Evaluation of landfill integrity after emergency events (Special Conditions, Section A, Items 13.c).
 - f. Subsurface Landfill Gas, Temperature Monitoring, and Contingency Plan (Special Conditions, Section A, Item 14).
 - g. Proposed changes to liner or LCRS design (Special Conditions, Section B, Item 3).
 - h. Liner installation notification (Special Conditions, Section B, Item 4).
 - i. Identification of hazardous or PCB waste (Special Conditions, Section C, Item 3.d).
 - j. Contaminated materials acceptance (Special Conditions, Section C, Item 5.d).
 - k. Changes to user population (Special Conditions, Section D, Item 3).
 - l. Daily cover monitoring verification program (Special Conditions, Section D, Item 25).
 - m. Explosive gas exceedances (Special Conditions, Section F, Item 6).
 - n. Monitoring well/manhole/wet well/sump status (Special Conditions, Section G, Item 6).
 - o. Exceedance of leachate compliance levels (Special Conditions, Section G, Item 13.c).
 - p. Notification of intent to close landfill units (Special Conditions, Section H, Item 3).
 - q. Final cover system areas (Special Conditions, Section H, Item 9).
3. The permittees shall submit the following documents, and any other document requirements specified in this permit, in hardcopy and electronic format.
- a. Submit Master Plan (Special Conditions, Section A, Item 2).
 - b. Surface Water Management Plan (Special Conditions, Section E, Item 5).
 - c. Gas monitoring probe construction/repair/abandonment (Special Conditions, Section F, Item 4).
 - d. Explosive gas monitoring reports (Special Conditions, Section F, Item 5).
 - e. Explosive gas exceedance plans/reports (Special Conditions, Section F, Item 6).
 - f. Monitoring well/manhole construction and repair (Special Conditions, Section G, Item 6).
 - g. Groundwater/Leachate Monitoring Report (Special Conditions, Section G, Item 22).
 - h. Closure plans and specifications (Special Conditions, Section H, Item 2).
 - i. Summary report of closure construction (Special Conditions, Section H, Item 6).
 - j. Revisions to Closure and Post Closure Report (Special Conditions, Section H, Item 7).

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- k. Copy of notation to deed following closure (Special Conditions, Section H, Item 8).
4. The permittees shall submit an Annual Operating Report (AOR), for reporting period July 1 – June 30. The AOR shall be submitted by July 31 of each year to:
Solid and Hazardous Waste Branch
Environmental Management Division
Hawaii Department of Health
P.O. Box 3378
Honolulu, Hawaii 96801-3378
 5. The Annual Operating Report shall be submitted in hardcopy and electronic format, and shall include the following information:
 - a. Types of solid waste received (MSW, green waste, industrial/commercial, tires, wood, metals, asbestos, and other special wastes).
 - b. Quantities of solid wastes received by type with totals using an appropriate unit of measure.
 - c. Quantities of leachate (gallons) generated and how it was handled or disposed.
 - d. Using site-specific data, provide results of the HELP model and demonstrate the validity of the alternative liner design with respect to point of compliance requirements. This validation shall be included in the first AOR submitted after receipt of this permit, unless meteorological conditions require further evaluation.
 - e. Quantities of filled airspace for the present year, past filled airspace and remaining airspace in both cubic yards and years shall be provided. The information shall be provided in both numerical and graphical presentations.
 - f. On or before July 31 of each year, the permittees shall submit an annual topographic survey of the site as prepared by a land surveyor registered in the state of Hawaii, aerial surveys, or an approved alternate method. The survey shall compare topographic elevations to final grades as approved in this permit.
 - g. A Sequencing Plan, including a drawing, identifying the cell areas to be filled in the coming year including identification of the wet weather areas. The cell

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areas and wet weather area capacity shall be provided using an appropriate unit of measure.

- h. Final fill areas, intermediate fill areas, and future unused fill areas shall be identified for the projected year.
- i. Daily (MSW) cell construction plan, including cell geometry, estimated daily cover volumes, and soil:waste ratios.
- j. A soil-balance report of the past year and coming projected year reported separately. The soil daily cover and intermediate cover including erosion replacement soil also shall be reported separately. The source and type of soil shall be recorded separately for daily cover and intermediate cover. The soil-balance report for the past year shall be based on records of actual use in a daily, weekly and monthly basis. Any exceedance of permit grades or incomplete/non-application of daily cover shall be identified. Current soil use records shall be maintained at the facility for review.
- k. Date of final receipt of waste at each cell in the landfill. A schedule and description of anticipated closure and post-closure activities to be performed within the next five years.
- l. A summary of closure and post-closure activities performed during the reporting period.
- m. A copy of the detailed written estimates and documentation of financial assurance.

PART III - SPECIAL CONDITIONS – Material Drop-Off Facility

- 1. The permittees shall comply with the facility's operations procedures as provided in the *Existing Materials Drop-off Facility Operations Plan* prepared by AECOM Technical Services, Inc., and dated August 2013, and approved subsequent submissions. Should there be any discrepancies between the submitted materials and permit conditions, the permit conditions shall take precedence.
- 2. The facility may only accept and store the following waste streams as specified below.
 - a. Green waste in roll-off containers,
 - b. Clean recyclables in drop-off bins, where clean recyclables include cardboard, newspaper, glass, aluminum cans, plastic bottles (#1 and #2), mixed paper, and steel food and beverage cans,

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- c. Tires in roll-off containers,
 - d. Residential municipal solid waste in roll-off containers,
 - e. Used oil in storage drums located in the maintenance shop, and
 - f. White goods.
3. The facility shall not accept scrap vehicles, lead acid batteries, and recyclable materials from commercial customers. No regulated hazardous waste, in accordance with state hazardous waste laws and regulations, radioactive waste, or PCB wastes as defined in 40 CFR Part 761, shall be accepted at this facility.
 4. Individual waste streams shall be stored separately. Waste streams shall not be commingled or mixed with other solid waste or other materials, such as dirt, rocks, and vegetation.
 5. Should unacceptable material enter the facility (including by-products or contaminants removed during screening, sorting, or processing), this material shall be properly stored, managed, and disposed of at appropriate DOH-permitted solid waste facilities prior to causing or creating a nuisance condition, health, safety, or environmental hazard. If any of this waste or waste generated at the facility is determined to be hazardous, the waste should be properly managed and disposed of in accordance with hazardous waste rules.
 6. Measures shall be taken to prevent fluids and spills from being discharged or allowed to enter into sewers, drainage systems, surface or groundwater, water courses, marine waters, or onto the ground. Measures include the use of structural catchment systems, or absorbent materials.
 7. Discharges of wash water, storm water and wastewater from the facility processes and cleaning operations shall be in accordance with all applicable federal, state, and local rules and ordinances. The permittees shall not discharge and retain leachate, including stormwater that contacts solid waste or fluids, without notifying or obtaining approval from the DOH-SHWB.
 8. Appropriate engineering controls shall be instituted and implemented to prevent the scattering of litter and other solid waste, and to provide adequate drainage of storm water for the site, including paved areas and other surrounding areas.
 9. Suitable means shall be provided to prevent and control fires. Access lanes shall be provided and maintained to allow for fire response or vector control.
 10. Suitable means shall be employed to control nuisances and minimize odors and vectors (such as rodents and insects). The facility shall maintain a neat and orderly

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appearance and must be screened and buffered to minimize nuisances to neighboring properties.

11. Illegal dumping, especially of putrescible or combustible material, shall be removed immediately to DOH-permitted waste management facilities.
12. Scavenging at the facility is prohibited.
13. No processing of materials shall be performed at the MDOF.
14. Materials collected shall be transported to DOH-permitted recycling or disposal facilities allowed and willing to accept such waste, or out-of-state recycling facilities and end markets.
15. The maximum on-site storage of shall be limited to the following capacity limits, and shall be removed in accordance with the schedule in the MDOF Operations Plan.
 - a. Green waste 400 cubic yards
 - b. Tires 70 tires
 - c. White goods 35 units
 - d. Used oil Six (6) 55-gallon drums
 - e. Clean recyclables 30 cubic yard container (4 ports), and 10 cubic yard container
 - f. Municipal solid waste Two (2) 30 cubic yard roll-off container
20. The permittees shall comply with the tire disposal requirements specified under HRS 342I for *Used Motor Vehicle Tire Recovery*. On-site storage shall be limited to 70 waste tires and shall meet all the relevant requirements of the local county fire code.
 - a. Tire piles must be free of all contaminants such as oil, grease, gasoline, diesel, etc. that could create fire hazards. Tires must be stored so that they minimize the accumulation of water in the tires.
 - b. Tires shall be disposed only at a DOH-permitted recycling facility allowed to accept waste tires or out-of-state recycling facility.
21. Unprocessed white goods shall be stored in an upright position and shall not be stacked.
22. Containers used to store used oil must be labeled or marked clearly with the words, "Used Oil" (HAR 11-279, *Standards for the Management of Used Oil*). Storage area shall also comply with other applicable requirements of HAR 11-279 Subchapter C. Containers of used oil shall be placed in a secondary containment that is capable of holding more than the contents of the largest container in the containment area.

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Such secondary containment may include dikes, berms, or retaining walls, and a liner or impervious floor, such as concrete. The secondary containment system shall not be used as fluid storage. If fluid is found in the secondary containment system, the fluid shall be removed and properly disposed of, and the source of the fluid or leak determined and corrected.

23. In addition to requirements in Standard Condition No. 15, records of screening and all transactions shall be kept a minimum of five (5) years. Copies shall be made available to the DOH for its use upon demand. The record information shall include:
 - a. weekly total quantity of greenwaste, tires, white goods, used oil, clean recyclables, and municipal solid waste on-site;
 - b. weekly total quantity, type, and final destination of greenwaste, tires, white goods, used oil, clean recyclables, and municipal solid waste transported from the site;
 - c. copies of receipts of sale, recycling, or disposal of material.

24. The permittees shall comply with the recordkeeping requirements relating to used motor vehicle tires as provided under the HRS Chapter 342I. The statute requires facilities that accept used tires to submit a summary of the following information by July 31 of each year:
 - a. name, phone number, and address of the person, company, business, source, or entity from whom the used tires were received, if receiving used tires from entities other than the general public, such as tire retailers, wholesalers, transporters, collectors, and recyclers;
 - b. date of receipt of used tires;
 - c. quantity of used tires received; and
 - d. record of shipment indicating:
 - i. ultimate destination of the used tires;
 - ii. identification of the transporter;
 - iii. date of shipment; and
 - iv. quantity of tires shipped.

25. An annual report for the MDOF shall be prepared and submitted to the DOH, reviewing the past year's operations and detailing the total quantity of greenwaste, tires, white goods, used oil, clean recyclables, and municipal solid waste, recycled, or disposed for the previous fiscal year (July 1 to June 30) by July 31 of each year. The report shall be submitted with the landfill AOR as required in Special Conditions, Section I, Items 4 and 5.

