

MICHAEL P. VICTORINO
Mayor

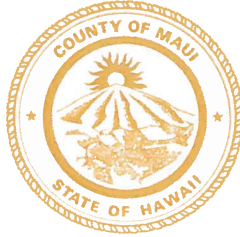
ERIC A. NAKAGAWA, P.E.
Director

SHAYNE R. AGAWA, P.E.
Deputy Director

MICHAEL P. RATTE
Solid Waste Division

SCOTT R. ROLLINS, P.E.
Wastewater Reclamation Division

TAMARA L. FARNSWORTH
Environmental Protection &
Sustainability Division



**COUNTY OF MAUI
DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT**
2050 MAIN STREET, SUITE 2B
WAILUKU, MAUI, HAWAII 96793



September 23, 2019

Mr. Daniel E. Orodenker, Executive Officer
State of Hawaii Land Use Commission
Department of Business, Economic Development, and Tourism
P.O. Box 2359
Honolulu, HI 96804-2359

Dear Mr. Orodenker:

SUBJECT: FY2019 ANNUAL REPORTS FOR MAUI COUNTY LANDFILLS

Enclosed are the FY2019 annual reports for the following landfills in Maui County:

SP86-359 Central Maui Landfill
SP93-383 Molokai Integrated Solid Waste Facility
SP94-386 Lanai Landfill
SP97-390 Central Maui Landfill Expansion
SP08-402 Hana Landfill

One original report and one copy is enclosed. An electronic copy of each report has been sent to Riley.K.Hakoda@hawaii.gov. Copies have also been routed to the County Planning Department.

If you have any questions, please contact Elaine Baker at 808-270-7872.

Sincerely,

for ERIC A. NAKAGAWA, P.E.
Director of Environmental Management

cc: Robert Schmidt, Acting Chief, Solid Waste Division

**LANAI SANITARY LANDFILL
STATE LAND USE COMMISSION
FY2019 ANNUAL REPORT
FOR SP94-386**



Part 1: Project Summary

Erosion Control

Erosion control continued to be a priority with maintaining the hydroseeded slopes that now comprise the makai end of the landfill. The top slope was hydroseeded in FY2018 wrapping around from the highway side to the gulch side. The lower side slope along Kaumalapau Highway was hydroseeded in January 2016 and reshot in April 2016 due to a problem with the grass mix. The bottom slopes on the Kalamaiki Gulch side and west end had been hydroseeded in April 2015.

Rye and Bermuda grasses are well established. Piping has been placed on slopes to drain roadways and terraces. Hedges of Vetiver re-direct stormwater flows away from the west end of the landfill which is the low point. Vegetation has not only reduced the amount of sediment and runoff reaching the retention pond, but has also protected the landfill slopes from the severe wash-outs which occurred before they were vegetated.

Photovoltaic Lights

The year-long contractor warranty was in effect in FY2019 for CDF Engineering LLC, contracted in FY2018, to design and install photovoltaic outdoor lighting systems for both Hana Landfill and Lanai Landfill for \$164,500. Four light poles with photovoltaic panels and batteries were placed at the office/baseyard area of Lanai Landfill to illuminate the area after hours for additional security and safety considerations.

Part 2: Project Compliance

Condition No. 1

That the State Land Use Commission Special Use Permit shall be valid until September 13, 2029, subject to further extensions by the Lana'i Planning Commission and the State Land Use Commission upon a timely request for extension filed at least ninety (90) days prior to its expiration.

Response

On January 23, 2014 the Department of Environmental Management requested another ten-year extension of the Planning Department. The reply was received on January 27, 2014. Due to Planning Department staffing, the hearing was held before the Lanai Planning Commission on August 19, 2015, and before the Land Use Commission on November 19, 2015. Based on capacity calculations the request was changed to a 15-year extension. Both Commissions granted the time extension.

Condition No. 2

That full compliance with all applicable governmental requirements shall be rendered.

Lanai Landfill FY2019 LUC Annual Report for SP94-386

Page 2

Response

The landfill is permitted by the Department of Health (DOH) and follows the operating criteria of RCRA 40 CFR Part 258 Subpart C-operating criteria and Chapter 58.1 of Title 11, Hawaii Administrative Rules, 11-58.1.1-15--Municipal solid waste landfills--operating criteria. The landfill has the small community exemption with less than 20 tons per day and an annual rainfall less than 20 inches.

Condition No. 3

Petitioner shall utilize non-drinking water, to the extent possible, for grading and dust control at the landfill.

Response

The landfill has their own water truck and currently uses an agricultural source of water provided by Pulama Lana'i for dust control and maintenance of the grassed slopes.

Condition No.4

Petitioner shall ensure that impacts from windblown debris into Kalamaiki Gulch is mitigated in a timely manner.

Response

A series of litter fences are placed next to and downwind of the working face to catch litter before it blows away. Netting has been anchored by poles at the downwind landfill perimeter as well as downwind of the working face; portable litter fences are located downwind and adjacent to the working face. Landfill personnel routinely collect litter from these fences. A 6-foot chain link fence functions as a litter barrier on the highway side of the landfill and the two ends. Wood panels have been placed along the bottom of the fence to prevent litter from blowing under it. A construction fence has been installed on the gulch side of the perimeter swale to stop litter from blowing over the side of the landfill and into Kalamaiki Gulch. Waste disposal is confined to the working face where it is compacted after receipt to control litter at its source. In the second quarter of FY2018 the working face was moved to the mauka half of the landfill with the litter fences placed accordingly.

Condition No.5

Petitioner shall immediately stop work and contact the State Historical Preservation Division, Department of Land and Natural Resources should any previously unidentified archaeological resources such as artifacts, shell, bone, charcoal deposits, human burial, rock or coral alignments, pavings or wall be encountered during development of the Special Permit area.

Response

The landfill is expanding vertically over an existing footprint so that filling occurs over a previously established disposal area rather than over new ground.

Lanai Landfill FY2019 LUC Annual Report for SP-94-386

Page 3

Condition No. 6

Petitioner shall fully comply with requirements of the State Department of Health for sanitary landfill operation.

Response

The landfill is permitted by DOH and follows the operating criteria of RCRA 40 CFR Part 258 Subpart C—operating criteria and Chapter 58.1 of Title 11, Hawaii Administrative Rules, 11-58.1.1-15--Municipal solid waste landfills—operating criteria.

Condition No.7

Petitioner shall timely provide without any prior notice, annual reports to the Land Use Commission and the County of Maui Planning Department in connection with the status of the subject project and Petitioner's progress in complying with the conditions imposed herein. The annual report shall also include the capacity remaining in the landfill at the time of submission of the annual report. The annual report shall be submitted in a form prescribed by the Executive Officer of the Commission.

Response

This submission of this report to the State Land Use Commission complies with this condition. Remaining capacity, projected by A-Mehr Inc., is 14.6 years, based on the usage of 17,196 cubic yards for the year. 4,855 tons were disposed in FY2019. Weights are based on volume as there is no landfill scale.

Condition No. 8

The conditions imposed herein may be fully or partially released upon timely motion to the Lana'i Planning Commission and Land Use Commission and upon the provision of adequate assurance of satisfaction of these conditions by the Petitioner.

Response

In the June 29, 2004 request to the Planning Department for a time extension, the Solid Waste Division also requested that the former Conditions No. 3 and No. 4 be deleted as they have been met and are no longer applicable. They were deleted.

Condition No. 9

Two years prior to the expiration of this Permit, the Applicant shall come before the Lana'i Planning Commission with a comprehensive plan describing how the County and/or State plan to manage the Island of Lanai's solid waste and recycling.

Response

The lease to the redemption site, operated by Maui Disposal with state bottle bill funds, was not renewed by owner Larry Ellison with the County on June 30, 2013. The County does fund scrap metal and electronics collection events which are managed by Pulama Lana'i; The plan to continue landfilling, while exploring other solid waste alternatives, was presented to the Lana'i Planning Commission on August 19, 2015.

Lanai Landfill FY2019 LC Annual Report for SP-94-386
Page 4

Condition No. 10

That the Applicant implement the attached Best Management Practices designed to minimize infiltration and runoff during the operation of the landfill.

Response

- The landfill does not collect scrap in containers, nor batteries or unused paint.
- Containers for supplies are kept on a concrete slab near the trailer office.
- A 15 ft. wide concrete perimeter swale collects run-on into and run-off from the landfill and routes it into a collection basin via two riprap channels.
- The swale is routinely cleared of any debris and sediment.
- The basin is cleared of accumulated sediment prior to the rainy season.
- The vegetated landfill side slopes and cover minimize infiltration of storm water into the waste.
- Greenwaste berms, placed around the top of the slopes, prevent run-off down the slopes.
- Three tiers of landfill slopes on the makai end been hydroseeded with rye and Bermuda grass which have been maintained.
- Piping has been installed to direct run-off from terrace roads to the swale.
- Soil is applied on rainy days instead of the tarp as alternative daily cover.

In March 2013, the County hired a vendor to plant 400 feet of Vetiver grass along the lower fence and around the bottom slope of the landfill to control stormwater run-off which flowed across the bottom portion of the landfill from a culvert under the highway in September 2012. The Vetiver hedges have become established and have prevented stormwater run-off from flowing onto the landfill. An additional Vetiver hedge was planted at the base of the landfill in April 2014 for a total of three hedges in three areas.