

**LANAI SANITARY LANDFILL  
STATE LAND USE COMMISSION  
FY2014 ANNUAL REPORT  
FOR SP94-386**

**Part 1: Project Summary**

At the end of June 2013, the County's consultant, Brown and Caldwell with Hirata Drilling, installed three moisture sensors in each of three wells drilled at Lanai Landfill at upslope, downslope, and midslope locations. The installation followed from discussions with the Dept. of Health (DOH) regarding an alternative groundwater monitoring program. These discussions were pursuant to the Department's application for a renewal of the operating permit for Lanai Landfill. Moisture readings were taken immediately following installation to confirm the sensors were working. Subsequent data, recorded hourly, for temperature, moisture content, and electrical conductivity have been downloaded for a report to the DOH.

The County engineer took monthly readings during FY2014 for a report to the Dept. of Health on the data recorded from the installation in June 2013 to March 2014. The report was finalized in April 2014 and transmitted in May 2014. The midslope sensor malfunctioned in December 2014, with breaks in the data as well as negative values. However, when it did produce good data, the conclusion was the same as for the upslope and downslope sensors, that there is no leachate collecting in the landfill.

On January 23, 2014 the Dept. of Environmental Management requested of the Planning Dept. Director a time extension of ten years for this permit. The Dept. of Environmental Management sent out response letters to agencies commenting on this extension, and is waiting for the Land Use Commission hearing to be scheduled by the Planning Dept.

**Part 2: Project Compliance**

Condition No. 1

That the State Land Use Commission Special Use Permit shall be valid until September 13, 2014, subject to further extensions by the Lana'i Planning Commission and the LUC upon a timely request for extension filed at least ninety (90) days prior to its expiration.

Response

On March 19, 2008 the Lanai Planning Commission heard the County's request to extend the current Special Use Permit for another ten years. This request was approved and forwarded to the Land Use Commission for review. On September 12, 2008 the Land Use Commission approved the extension for another ten years. On January 23, 2014 the Dept. of Environmental Management requested another ten year extension of the Planning Dept. The reply was received on January 27, 2014. Agencies were notified and response letters were sent to those commenting on the extension. The Dept. is waiting for the Planning Dept. to schedule the Land Use Commission hearing on the extension.

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Condition No. 2

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

Response

The landfill 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 installation of moisture sensors meets the requirement of an alternative groundwater monitoring program for this remote landfill which receives less than 20 tons per day and has an annual rainfall of 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 did get their own water truck and currently uses an agricultural source of water provided by Pulama Lana'i for dust control and soil moisture conditioning.

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. Additionally, a 6-foot fence functions as a litter barrier on three sides of the landfill. Wood panels have been placed along the bottom of the fence to prevent litter from blowing under it. A new fence has been placed along a section of the swale on the gulch side to stop litter from blowing over the side of the landfill. Refuse disposal is confined to the working face and is compacted after receipt to stop litter at its source.

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.

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Condition No. 6

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

Response

The Department of Health has reviewed and commented on the updated Operations Plan and Closure Plan and Master Plan which was submitted in December 2011 and further revised in February 2012 as part of the permit renewal application.

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 Brown and Caldwell in the Master Plan from surveys by Akamai Land Surveying in 2007 and 2008, was 313,00 CY in 2012. Topography in June 2012 supported the estimate of 20 years remaining life. The 2013 topography indicated a similar rate of fill as in previous years. The commercial tonnage increased in 2014 by 13% with a total tonnage of 4990 tons, about 13.5 tons/day.

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 effective June 30, 2013. The County does fund scrap metal and electronics collection events. However, no other recycling is funded.

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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

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 basin is cleared of accumulated sediment prior to the rainy season. The swale is routinely cleared of any debris and sediment. The 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. 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.