

**CENTRAL MAUI LANDFILL
STATE LAND USE COMMISSION
FY2013 ANNUAL REPORT
SP86-359**

LAND USE COMMISSION
STATE OF HAWAII

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Part 1: Project Summary

Landfill Gas

Landfill gas wells were monitored by the County and reports submitted to the Dept. of Health, Clean Air Branch. Landfill gas emissions are collected and piped to the flare installed near Phase IV of the Central Maui Landfill. After completion of a landfill gas report which reviewed options available to the County for conversion of the gas to useable energy, technical and legal services to develop a Request for Proposals were procured. The County advertised in August 2011 for contractors to design, construct, and operate a landfill gas to energy (LFGTE) facility. Proposals for the LFGTE project were received in November 2011 but negotiations with a developer were not successful.

Gulch Crossing

A grading plan was prepared for a grading permit which was issued in October 2012. Bid specifications to re-grade the crossing and surrounding areas were prepared by the County and bid in February 2013 with a contract awarded to Goodfellow Brothers for \$64,713 in April 2013.

Co-composting and Fats, Oil & Grease (FOG)

The \$3M co-composting contract for biosolids and greenwaste continued with fats, oil, and grease collection subcontracted to Pacific Biodiesel for processing off-island.

Part 2: Project Compliance

Condition 1: That the adjacent Kalialinui Gulch shall not be disturbed by the activities of the sanitary landfill with the exception of drainage from storm generated runoff.

Report: The Gulch was cleared of any remaining litter due to landfill operations when Phases I and II were closed in 2006. No further landfill activity directly abuts the Gulch.

Condition 2: That appropriate monitoring of the quality of water to be discharged into Kalialinui Gulch from drainage basins shall be undertaken to assure that toxic wastes are not part of the discharge.

Report: Any stormwater discharged into Kalialinui Gulch is tested for parameters listed in the NPDES permit. Two detention ponds have had adequate storage capacity to hold run-off from both the composting facility and closed landfill during storm events.

Condition 3: That in the preparation of the sanitary landfill, the landfill floor shall be further compacted and be made relatively impervious to water in order to contain leachate. Proper disposal methods of leachates shall be installed within the landfill.

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Report: A riser and perforated pipes were placed at a low point in the landfill floor after excavation of waste to locate the original leachate collection pipe. However, after back-filling the waste with cover soil, no leachate has been observed, probably due to the dryness and depth of waste, low rainfall, and high daily temperature. The riser is checked periodically, but no leachate has been observed to be collected.

Condition 4: That a traffic assessment shall be developed to determine the impact on Pulehu Road once the sanitary landfill is operating. This assessment shall be completed no later than one year after said landfill is in operation. Findings of the assessment shall be submitted to the County of Maui's Department of Planning for review.

Report: This was completed by R. M. Towill as part of their original design work.

Condition 5: That the Applicant shall stop work on the sanitary landfill and immediately contact the Department of Land and Natural Resources, Historic Sites Division, in the event that any previously unidentified historic, archaeological or cultural sites are encountered.

Report: No previously unidentified historic, archaeological, or cultural sites were found.

Condition 6: That appropriate internal vehicle circulation patterns shall be designed so as to not cause confusion and congestion within the sanitary landfill.

Report: Phases I and II are closed to all traffic except for monitoring and maintenance. Traffic to the composting and fats, oil, and grease (FOG) facility goes through the Phase IV landfill entrance, across the gulch, and directly to the composting and FOG facilities. Traffic includes green waste disposers, sludge trucks, fats, oil, and grease trucks, and compost customers.

Condition 7: That full compliance with the requirements of the State's Department of Health for sanitary landfill operation shall be rendered.

Report: Phases I and II were closed according to Dept. of Health regulations.

Condition 8: That appropriate rules shall be established to prohibit scavenging within the sanitary landfill.

Report: Phases I and II are closed to the public and capped according to regulations.

Condition 9: That appropriate mitigative measures to control excessive dust generation shall be implemented.

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Report: Phases I and II are covered with drought-resistant grass and has paved roads.

Condition 10: That provisions shall be enacted to ensure emergency access to the sanitary landfill in case of fire or any other disaster.

Report: The Fire Dept. on Dairy Road has keys to the landfill in case of a problem.

Condition 11: That warning signs shall be clearly posted near all entry points of the landfill to indicate any blasting activity on the adjacent rock quarry.

Report: There is no public entrance to Phases I and II. Blasting is done well beyond the landfill as quarrying activity has moved well beyond the area adjacent to the landfill.

Condition 12: That full compliance with any other applicable government requirements shall be met.

Report: NSPS regulations are followed for landfill gas measurement and reporting.

Condition 13: Petitioner will submit to the Commission a letter from Ameron HC&D requesting an amendment to the Special Permit issued under docket No. SP77-271 to delete a portion of land consisting of the Property, currently approved for quarrying purposes, for the establishment of the Project, pursuant to Section 205-6, Hawaii Revised Statutes.

Report: This was done at that time.

Condition 14: Permitted activities shall include the processing of special waste into marketable materials, such as biodiesel and compost, as an additional use under the special use permit.

Report: For FY 2013 County contractor Maui EKO Systems received 22,847 tons of biosolids and related materials such as grit and lift station pumpings; approximately 20,000 tons of green waste, pallets, and wood chips were received. A total of 11,103 units of compost were sold (units include categories of bulk, cubic yards and 40 quart bags). Their sub-contractor, Pacific Biodiesel, received 6,849 tons of commercial fats, oil, and grease (FOG). In FY 2013 biodiesel production was transferred from the Maui plant to the Big Island plant. FOG is screened and dewatered before transport to the Big Island plant for processing into bunker fuel or biodiesel.

Condition 15: That the Applicant shall satisfy the County of Maui Department of Water Supply standards for fire protection.

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Report: There are two fire hoses connected to the on-site water tank which meets the County standards for fire protection at the compost facility. For the fire that spread from the finished compost to greenwaste receiving in June 2013, heavy equipment assisted in controlling the fire along with equipment from the Fire Dept.

Condition 16: That security safety measures including, but not limited to, the methanol tanks, onsite catalyst, and lab container shall be implemented due to the type of products used and produced onsite.

Report: As biodiesel production has been discontinued, the only materials stored on-site at Pacific Biodiesel are the fats, oil, and grease prepared for transport to the Big Island plant.

Condition 17: That a combustible liquid tank permit shall be acquired and maintained, as necessary.

Report: Permits issued by the County Fire Prevention Bureau have been renewed.

Condition 18: That the Applicant shall timely provide without any prior notice, annual reports to the Commission and the County of Maui Department of Planning in connection with the status of the uses approved under the special use permit and the Applicant's progress in complying with the conditions imposed herein. The annual report shall be submitted in a form prescribed by the Executive Officer of the Commission.

Report: Filing of this FY 2013 annual report complies with this condition.