

**CENTRAL MAUI LANDFILL
STATE LAND USE COMMISSION
FY2020 ANNUAL REPORT
SP86-359**



Part 1: Project Summary

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

At Phase III of Central Maui Landfill, Maui EKO Systems continued co-composting greenwaste and biosolids until March 1, 2020 when ground greenwaste was mixed with biosolids and hauled to the landfill for disposal. Preparations began for clearing the greenwaste receiving and grinding area and moving it across Phase III to the border with the quarry. Biosolids and fats, oil, and grease (FOG) collection continued as is with Pacific Biodiesel processing FOG off-island. Water from de-watered FOG was piped into the biosolids bay with grease trap waste and lift station pumpings going directly into the bay. For FY 2020 approximately 27,547 tons of greenwaste were received along with 21,602.84 tons of County biosolids, 345.95 tons of private biosolids, and 7569.18 tons of FOG. A 6-month contract for \$1M was signed with Maui EKO until the receiving, grinding, mixing, and hauling process could be bid in FY 2021.

Organics Processing (OP) Facility Design and Bid

Approximately half the Phase III site will operate as an organics processing facility for the next few years while the other half will be constructed as a landfill for municipal solid waste (MSW). The former greenwaste receiving/grinding area will have low permeable soil compacted over its surface as will the mixing area for biosolids and mulch. The design incorporated comments from the Dept. of Health; bids were opened May 28, 2020 with Rojac Construction, Inc. awarded the contract for \$923,044.50. The Environmental Protection and Sustainability Division contracted with A-Mehr Inc in FY 2020 for \$88,855 for Engineering and Permitting Support Services for Maui EKO Relocation. A-Mehr Inc. is contracted by the Solid Waste Division to provide construction quality assurance services for \$182,865 for construction of the OP Facility.

Central Maui Landfill Phase III-A Design and Bid

Design of the MSW portion of Phase III incorporated comments from the Dept. of Health and a bid package was prepared for advertising early in FY 2021 for its construction. Phase III Design and Permitting was contracted to A-Mehr Inc. for \$250,000 in FY 2019.

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. The fenced and paved perimeter road buffers the Gulch from the grass covered landfill.

Central Maui Landfill FY2020 LUC Annual Report for SP86-359
Page 2

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

Report: Any stormwater discharged into Kaliialinui Gulch is tested for parameters required by NPDES permits. Detention ponds have had adequate storage capacity to hold run-off from both the composting facility and closed landfill during storm events. Replacement ponds will maintain storage capacity for Phase III operations.

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.

Report: A riser pipe and perforated pipes running laterally from its base were placed at a low point in the landfill floor after excavation of waste to locate the original leachate collection pipe. Leachate has not been observed, due to the dryness and depth of waste, low rainfall, and warm temperatures. The landfill was constructed with a compacted floor and piped leachate collection system which was not located during the exploratory excavation at the low point conducted in 2004.

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 in 1986. HDR Engineering, Inc. was contracted in May 2019 to count traffic volumes at the landfill entrance and evaluate the need for a left-turn lane on Pulehu Rd.

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. Phase III roadways will be improved as part of the construction of the OP facility and new MSW landfill.

Central Maui Landfill FY2020 LUC Annual Report for SP86-359
Page 3

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 Department of Health (DOH) rules and regulations. Phase III will operate with a DOH permit.

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. Phase III will have controlled access.

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

Report: Phases I and II are covered with drought-resistant grass and has paved roads. There are no areas with exposed soil which would generate dust. Periodic rainfall replenishes vegetated cover. Operations in Phase III will control dust with water trucks.

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 contractor posts signs and restricts traffic during blasting activities.

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

Report: New Source Performance Standards (NSPS) are followed for landfill gas measurement, for wells within the landfill, surface emissions from the cover, and perimeter gas probes. Sampling and metering are done quarterly and reports are made to the Department of Health, Clean Air Branch and Solid Waste Branch. Landfill gas is piped to the flare at Phase IV, which is monitored and maintained with notifications of down time made to DOH. The new landfill incorporates gas collection and monitoring.

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

Central Maui Landfill FY2020 LUC Annual Report for SP86-359
Page 4

purposes, for the establishment of the Project, pursuant to Section 205-6, Hawaii Revised Statutes.

Report: This was completed 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 permit.

Report: For FY2020 County contractor Maui EKO Systems produced compost from 21,602.84 tons of County biosolids and related materials such as grit and lift station pumpings; 345.95 tons from private biosolids plants; 27,547 tons of greenwaste, 20,775 cubic yards of compost and/or mulch were donated to Central Maui Landfill as alternative daily cover. As of March 1, 2020 composting ceased to start landfill construction with ground greenwaste and biosolids mixed and hauled to CML.

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

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.

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 collected 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 are current.

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 2020 annual report complies with this condition.

