

MICHAEL P. VICTORINO  
Mayor  
ERIC A. NAKAGAWA, P.E.  
Director  
SHAYNE R. AGAWA, P.E.  
Deputy Director  
MICHAEL KEHANO, P.E.  
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**  
2145 KAOHU STREET, SUITE 102  
WAILUKU, MAUI, HAWAII 96793



January 26, 2022

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: FY 2021 ANNUAL REPORTS FOR MAUI COUNTY LANDFILLS**

Enclosed are the FY 2021 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

An electronic copy of each report was sent to [Riley.K.Hakoda@hawaii.gov](mailto:Riley.K.Hakoda@hawaii.gov) for e time-stamping. One original and one copy of the e time-stamped reports are enclosed. 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

Encl:  
cc: Michele McLean, Director of Planning, County of Maui  
Michael Kehano, Chief, Solid Waste Division, County of Maui

**CENTRAL MAUI LANDFILL  
STATE LAND USE COMMISSION  
FY2021 ANNUAL REPORT  
SP86-359**

**Part 1: Project Summary**

**Premixing Biosolids, Greenwaste, Fats, Oil, and Grease**

Co-composting ended on March 1, 2020 with subsequently received greenwaste ground and mixed with biosolids and grease trap waste and hauled to the landfill for disposal. For FY 2021 approximately 13,285 tons of commercial greenwaste were received with 19,120 tons of County biosolids, 320 tons of private biosolids, and 6,690 tons of grease trap waste for a subtotal of 26,130 tons. 74,030 tons of mix was placed at the working face with the balance of 34,615 tons comprised of unweighed residential greenwaste.

**Organics Processing (OP) Facility Construction**

A portion of the Phase III site operates as an organics processing facility where a low permeable soil surface was placed for greenwaste receiving and grinding and mixing with biosolids and grease trap waste. Rojac Construction was contracted for the surface placement work for \$875,177 early in FY 2021 and finished by December 2021. The Environmental Protection and Sustainability Division contracted with A-Mehr in FY 2020 for \$88,855 for relocation services. A-Mehr provided construction quality assurance services for \$182,865 with \$26,430 added in FY 2021.

**Phase III-A Construction**

Phase III design and permitting was contracted to A-Mehr Inc. for \$250,000 in FY 2019 with \$268,310 added in FY 2020. The project was bid in July 2020 and Alpha Hawaii was contracted for \$6,913,040.67 in December 2020 with construction commencing in March 2021 and substantially complete by November 2021. Prior to construction soil sampling and testing was done by Element Environmental for \$55,912 with a report made to the Department of Health (DOH). Public notification of the operating permit issued by DOH was made in July 2021. Filling with the fluff layer commenced in December 2021. Additional contractor work totaled \$1,462,052.07 for a total price of \$8,375,092.74. Construction work continued with lining the bottom portion of the Phase II slope. Construction quality assurance (CQA) monitoring and reporting was done by A-Mehr for \$430,925 with \$198,000 added in FY 2021.

**Phase III-B Design**

Phase III-B design was contracted to A-Mehr for \$250,000 using FY 2021 funds. Phase III-B will replace the OP facility in July 2023.

**Gas Collection and Control System (GCCS) Design and Construction**

Tetrattech was contracted with FY 2021 funds for \$111,899 for design and CQA work to cut and cap gas wells and/or place remote well heads on the Phase II slope. This work was included in the Alpha contract for \$1,568,060 using FY 2021 funds for landfill gas well drilling and installation on Phases IV and V. The work began in November 2021.

**Central Maui Landfill FY2021 LUC Annual Report for SP86-359**  
**Page 2**

**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.

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 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. Capacity for Phase III operations is achieved by routing stormwater to the CML basin.

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.

**Central Maui Landfill FY2021 LUC Annual Report for SP86-359**  
**Page 3**

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 new III-A landfill.

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: Blasting contractors post signs and restrict traffic during blasting activities; the active quarrying is on the other side of Phase I and II from the public access side.

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

**Central Maui Landfill FY2021 LUC Annual Report for SP86-359**  
**Page 4**

perimeter gas probes. Sampling and metering of perimeter probes are done quarterly and reports are made to the Department of Health, Solid Waste Branch. Landfill gas is piped to the flare at Phase IV, which is monitored according to its Clean Air permits.

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 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: Marketable materials are no longer produced on the Phase III site.

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

Report: There are two fire hydrants connected to an on-site water tank with a constant minimum volume of water, which meets the County standards for fire protection at the OP 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, these no longer apply.

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

Report: This is no longer needed.

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 2021 annual report complies with this condition.

**MOLOKAI INTEGRATED SOLID WASTE FACILITY  
STATE LAND USE COMMISSION  
FY2021 ANNUAL REPORT  
SP93-383**

**Section One: Regulatory Compliance**

Regulatory compliance handled during FY 2021 included the following:

- New contract with Maui Disposal for the Recycle Molokai facility operation.
- County taking over previously contracted greenwaste operation.
- Continued contract with Refrigerant Recycling to provide ongoing collection services at the Moloka'i Metals Facility for the receipt, processing, and shipping to Oahu of scrap metal, appliances, vehicles, and related materials.

**Recycle Molokai**

In FY 2021 a new contract with Maui Disposal was awarded for \$149,250 to operate the Molokai Recycling Center and Certified Redemption Center. Plastic, aluminum, and glass containers are redeemed through the state's HI-5 program and cardboard, newspaper, glass, plastic, and bi-metal cans are collected, baled, and shipped to Oahu. Used motor oil, anti-freeze, paint and electronics are collected and shipped to Oahu.

**Greenwaste Facility**

July 2021 County Solid Waste Division (COM-SWD) staff took over long-term operations for receiving and processing residential and commercial green waste into mulch at the Molokai Landfill. Three full-time personnel were authorized in the FY 2020 budget, one equipment operator and two laborers, to operate the County-owned Morbark chipper/grinder and greenwaste receiving site, on those days when they weren't collecting refuse. Refuse collection was transferred from the Dept. of Public Works/Highways to COM-SWD with \$40,000 added to the budget for grinder fuel costs.

**Molokai Metals Facility**

In FY 2021 Amendment 5 for \$497,988 was made to the contract with Refrigerant Recycling of Honolulu to equip and operate the Molokai Metals Recycling Facility and Remote Area Collection for collection events at Hana Landfill.

**Land Court Documents**

In FY 2021 Munekiyo Hiraga and their sub-consultant worked under the \$59,701 contract to complete required Land Court documents for Molokai Landfill subdivision.

**Phase 5 Construction Bid**

Work continued on the FY 2019 contract to A-Mehr, Inc. for \$99,850 to provide bid documents for construction of Phase 5 which was bid on October 11, 2021. Design and permitting services, contracted to A-Mehr, Inc. for \$199,945, was amended in FY 2021 for an additional \$232,195. Dept of Health issued a draft permit in November 2021. \$5M was budgeted in FY 2021 for construction. Goodfellow Brothers LLC, low bidder at \$4,623,750.00, was awarded the contract to start work in FY 2022.

**Section Two: Conditional Compliance**

Condition 1: That appropriate monitoring of the quality of water to be discharged into neighboring gulches from drainage basins shall be undertaken to assure that toxic wastes are not part of the discharge.

Response

Stormwater improvements were made during the construction of Phase 4 in FY 2015. Channels and drainageways were constructed according to design to ensure that wastes do not wash away from the working area into the stormwater basin. In addition, the basin was expanded to increase its capacity. A new channel will be constructed with Phase 5 to route stormwater from the entrance area to the retention pond.

Condition 2: That in 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 leachate shall be installed within the landfill.

Response:

Phase 3 has been constructed with a composite liner of a geosynthetic and compacted soil. A leachate sump, pump, and riser were installed to collect and measure any leachate. A lysimeter was installed in Phase 1 with Phase 2 graded to it. Leachate from the Phase 1 wet well and from the Phase 3 sump has been sampled and tested semi-annually and reported to the Department of Health. Phase 4 was constructed with a composite liner of geosynthetics and compacted low-permeable soil as Phase 5 will be. Phase 4 leachate is collected in the Phase 3 sump. Currently, leachate is pumped by the County Highway's truck and disposed of at the Kaunakakai wastewater treatment plant.

Condition 3: That a traffic assessment shall be developed to determine the impact on Maunaloa Highway 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 State Department of Transportation, Highways Division, and the Maui County Planning Department for review.

Response

The completed report was transmitted as required on May 10, 1995. A left-turn storage lane was installed on Maunaloa Highway. Construction began in July 2008 and was completed in 2009 with Department of Transportation-Highways approving the work.

Condition 4: 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, archeological, or cultural sites are encountered.

**Molokai Landfill FY2021 LUC Annual Report for SP93-383**  
**Page 3**

Response

This has not occurred to date during the construction of Phases 1, 2, 3 or 4. The landfill is currently being built over the established footprint and is not active over new ground. If any previously unidentified historic, archeological, or cultural sites are encountered at any time, work will cease and Historic Sites Division notified.

Condition 5: That appropriate internal vehicle circulation patterns shall be designed so as to not cause confusion and congestion within the sanitary landfill.

Response

There is a paved road into the landfill which turns into a dirt road up to the active area. Internal roadways are clearly marked for the public to easily access the active area.

Condition 6: That full compliance with the requirements of the State's Department of Health (DOH) for sanitary landfill operation shall be rendered.

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. The working supervisor manages landfill operations in accordance with the DOH issued solid waste permit and four other staff: cashier, two landfill attendants and an equipment operator. The landfill operations supervisor regularly visits the landfill and oversees operations for compliance at Molokai, Lanai, and Hana. The landfill sends weekly photos to the DOH as part of the alternative daily cover program in which a tarp is used.

Condition 7: That appropriate rules shall be established to prohibit scavenging within the sanitary landfill operation.

Response

No scavenging is allowed and rules are enforced by landfill staff; after hours the main gate on Maunaloa Highway is locked. The entire facility is fenced; access to it is controlled by a locked gate. The scrap metal receiving area is fenced inside the landfill parcel with a locked gate controlling access.

Condition 8: That appropriate mitigative measures to control excessive dust generation shall be implemented.

Response

Staff fill the landfill water truck at the Kaunakakai Highways baseyard on a regular basis to provide dust control for the internal roadways which are unpaved.



**Molokai Landfill FY2021 LUC Annual Report for SP93-383**  
**Page 4**

Condition 9: That provision shall be enacted to ensure emergency access to the sanitary landfill in case of fire or other disaster.

Response

The County District Supervisor has keys to all facility gates.

Condition 10: That final architectural and landscape planting plans be submitted to the Planning Department for review and approval. Upon approval by the Planning Department, a copy of the plans shall be submitted to the Land Use Commission.

Response

This was done during facility design prior to construction and opening in 1993.

Condition 11: That full compliance with other applicable government requirements shall be rendered.

Response

Readings are taken at the perimeter gas probes on a quarterly basis and reports made to the Department of Health. Leachate is sampled and tested semi-annually. The Spill Plan is updated as required and NPDES permit conditions are followed.

Condition 12: That alternative No. 3 of the geomembrane liner as found in the January 4, 1993 memo from Parametrix, Inc. to Dave Wissmar shall be used for Phase (Cell) 1.

Response

This was done during construction of Phase 1 in 1993.

Condition 13: The Applicant shall provide County of Maui Planning Department and Land Use Commission copies of the final approved metes and bounds map and description delineating the permit area of approximately 37.9 acres.

Response

The subdivision was final in June 2009. The final plat for the Land Court application was prepared by Ronald Fukumoto for Munekiyo Hiraga, who has been contracted to meet Land Court requirements with a sub-consultant handling the legal documents.

Condition 14: The Applicant shall commence operations of the Molokai Integrated Solid Waste Facility no later than six months from the date of filing of this Decision and Order by the Land Use Commission.

Response

The facility opened on October 1, 1993, within six months of May 14, 1993.

**Molokai Landfill FY2021 LUC Annual Report for SP93-383**  
**Page 5**

Condition 15: The Applicant shall timely provide, without any prior notice, annual reports to the County of Maui Planning Department and the Land Use Commission in connection with the status of the subject project 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.

Response

The submission of this report meets this requirement.

**LANAI SANITARY LANDFILL  
STATE LAND USE COMMISSION  
FY2021 ANNUAL REPORT  
FOR SP94-386**

**Part 1: Project Summary**

**Office Solar Power System**

The upgraded system with a half dozen maintenance-free lithium batteries and new charge controller, installed in March 2020, provided power to the Lanai Landfill office. The solar panels are regularly cleaned; however, some of their supporting framework requires replacement due to the corrosive effects of inclement weather.

**Photovoltaic Lights**

The year-long contractor warranty expired in FY 2021 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. CDF was on-site with a boom truck in June 2020 to re-ballast the lights which had dimmed since their installation and their work was covered under the contractor warranty. In FY 2021 efforts were made to obtain a man-lift to check on one of the lights which had dimmed again; however, no further site-work has been done due to lack of equipment availability.

**Landfill Operating Equipment**

One Peterbilt 4000-gallon water tanker, purchased in FY 2020 for \$294,607.49, was placed in service on October 27, 2021. Equipment earmarked in the FY 2021 budget for Lanai Landfill are a dozer for \$600,000 and \$450,000 for one automated refuse truck to replace the existing one. The bid opening to furnish and deliver one (1) track-type crawler tractor (bulldozer) was held on February 9, 2021 with Hawthorne Pacific Corp the low bidder at \$645, 829.20 providing a Caterpillar D7 dozer in 180 days.

**Demonstration for Groundwater Monitoring Exemption**

CH2M Hill Engineers prepared a technical memorandum, Lanai Landfill Demonstration for Groundwater Monitoring Exemption – Phase 1 for \$12,649. Their technical memo was submitted to the Department of Health (DOH) on May 23, 2021 and DOH responded with comments on June 29, 2021. The tech memo provided recommendations on the best approach to obtain the site specific data needed to demonstrate the basis for the exemption.

DOH concurred that the selected technical approaches (Risk and Additional Flexibility Evaluation, Vadose Zone Modeling, and Shallow Vadose Zone Monitoring Points) should provide sufficient site-specific data to evaluate whether leachate that may be generated at the landfill has the potential to impact groundwater. The proposal for Phase 2 of the work for \$195,310 is in the FY 2023 CIP budget request. This work will mobilize the drill rig and crew for the dozen borings to be logged, sampled, and tested.

**Lanai Landfill FY2021 LUC Annual Report for SP94-386**  
**Page 2**

**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 requirements, 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.

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 is renewing the application for 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

**Lanai Landfill FY2021 LUC Annual Report for SP-94-386**  
**Page 3**

side of the landfill and the north and south boundaries. Plywood has 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. When the working face moved to the mauka half of the landfill, litter fences were placed nearby.

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.

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 and County Planning Dept. complies with this condition. Remaining capacity is 25 years, with 12,938 cubic yards of fill for 3,632.71 tons disposed in FY 2021. Weights are based on volume.

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.

**Lanai Landfill FY2021 LC Annual Report for SP-94-386**  
**Page 4**

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.

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.

The County has incrementally hydro-seeded those portions of the landfill with interim cover so that vegetation has been established to prevent erosion of the cover material.

**CENTRAL MAUI LANDFILL (CML) EXPANSION  
STATE LAND USE COMMISSION  
FY2021 ANNUAL REPORT  
SP97-390**

**Part 1: Project Summary**

**CML Facilities**

Maui Planning Commission heard the request for renewal and modification of SP97-390 on December 10, 2019 and issued CUP 2008/0003 on February 6, 2020. The application, set for LUC on July 8-9, 2020, was heard remotely on August 13, 2020. Additional hearings were held remotely on September 24, 2020 and October 8, 2020.

**Prior Year Funded Projects Contracted in FY 2021**

**System Control and Data Acquisition (SCADA)**

SCADA design, contracted to Brown & Caldwell in FY 2019 for \$59,640, provides online telemetry for the landfill. ELCCO was contracted December 12, 2019 for \$210,200 to wire the generator for backup power. In FY 2021 their subcontractor, XTRLS, has converted current on-site data-logging and operational controls to an Opto 22 program logic controller for remote monitoring of both the flare facility and leachate tank farm.

**Leachate Recirculation**

\$650,000 was budgeted in FY 2020 for design/build of a leachate recirculation system for Phase V-B Extension. In FY 2021 a design contract was awarded to A-Mehr Inc. for \$187,460 and a construction contract was awarded to Maui Kupono for \$463,194.

**Litter Fence**

\$500,000 was budgeted in FY 2020 for an extension of the litter fence along Pulehu Rd. for Phase V-B Extension with drainageways. In FY 2021 a design contract was awarded to A-Mehr Inc. for \$87,985 and a construction contract to Alpha for \$555,018. Replacing existing netting added \$125,000 to the construction contract in FY 2021.

**Land Purchase**

An additional 59 acres was purchased for \$1,695,000 in FY 2021 with FY 2020 funds.

**Organics Processing Facility**

\$875,177 was awarded to Rojac Construction Inc. early in FY 2021 for the installation of low permeability receiving areas for greenwaste and mixing with biosolids. Composting ceased March 2020, so that the land area could be prepared after soil testing for construction of the Phase III landfill cell that commenced in March 2021. The Organics Processing Facility was completed in December 2020.

**Phase III-A Expansion**

Alpha was contracted for \$6,913,041 to construct the landfill cell in Phase III and began work in March 2021. Element Environmental tested soil in December 2020 for \$55,920.



**Prior Year Funded Projects with FY 2021 Funding Contracted in FY 2021**

**Customer Drop-Off Area and Entrance Facility Traffic Improvements**

These two projects were combined and \$150,000 was budgeted in FY 2020 and awarded to R.M. Towill to survey the entrance facility and evaluate potential locations for another waste collection roll-off. In FY 2021 an additional \$400,000 was budgeted, and half used for Towill to prepare a bid package for construction in FY 2022.

**Storage Facility/Infrastructure**

\$300,000 was budgeted in FY 2020 and \$400,000 in FY 2021 with \$123,980 awarded to A-Mehr for design and \$415,080 awarded to Alpha for construction in FY 2021.

**FY 2021 Funded Projects Contracted in FY 2021**

**Gas Collection and Control System**

In FY 2021 \$2M was budgeted for additional gas collection wells with Tetrattech design contracts awarded for \$249,862 and a construction contract to Alpha for \$1,568,060 after bidding at the end of FY 2021.

**Closure Design**

A contract for closure design was awarded to A-Mehr, Inc. for \$324,950 with FY 2021 funds of \$350,000.

**Equipment**

The FY 2021 budget included the following awards: \$310,000 for a water truck; \$285,000 each for two roll-off trucks and the following bids: \$75,000 for a ¾ ton pickup and \$950,000 for a compactor.

**Part 2: Project Compliance**

Condition 1: That the Land Use Commission Special Permit shall be valid until October 31, 2028, subject to further time extensions by the Land Use Commission upon a timely request for extension filed at least one-hundred twenty (120) days prior to its expiration. The appropriate Commission shall make a recommendation to the Land Use Commission and may require a public hearing on the time extension.

Report: The request for time extension was made in February 2018 as part of the application for landfill diversion activities and boundary changes. The request, for the State SP to run concurrently with the County Special Use Permit which expires on October 31, 2028, was heard by Maui Planning Commission on December 10, 2019. CUP 0008/0003 was issued on February 6, 2020 with expiration on October 31, 2028. The State Land Use Commission heard the matter on August 13, 2020, and deleted former Condition No. 6 concerning achieved development requirements and added new Conditions No. 18 through No. 23. The County requested reconsideration of Condition No. 23 at a hearing on September 24, 2020 which was dismissed due to a timeliness

issue. On October 8, 2020 the matter was heard again by Land Use Commission correcting a LUC staff error in acreage applicable to the District Boundary Amendment requirement from 22 acres of IAL to 95.659 acres of the total permitted area of the CML.

Condition 2: That the conditions of this State Land Use Commission Special Use Permit shall be enforced pursuant to Sections 205-12 and 205-13, Hawaii Revised Statutes. Failure to comply with one or more of the conditions herein shall result in a notice of violation issued by the appropriate enforcement agency, notifying the permit holder of the violation and providing the permit holder no more than sixty (60) days to cure the violation. If the permit holder fails to cure the violation within sixty (60) days of said notice, the appropriate enforcement agency shall issue an order which may require one or more of the following: that the violative activity cease, that the violative development be removed; that a civil fine be paid not to exceed ONE THOUSAND AND NO/100 DOLLARS (\$1,000) per violation; that a civil fine not to exceed FIVE THOUSAND AND NO/100 DOLLARS (\$5,000.00) shall be issued if violation not cured within six months of the issuance of the order. The order shall become final thirty (30) days after the date of its mailing or hand-delivery unless written request for a hearing is mailed or delivered to the Planning Department within said thirty (30) days. Upon receipt of a request for a hearing, the Planning Department shall specify a time and place for the permit holder to appear and be heard. The hearing shall be conducted by the Planning Director or the Director's designee in accordance with the provisions of Chapter 91, HRS, as amended.

Report: The County is complying with all conditions.

Condition 3: That the subject State Land Use Commission Special Permit shall not be transferred without the prior written approval of the Land Use Commission. The appropriate Planning Commission shall make a recommendation to the Land Use Commission. However, in the event that a contested case hearing preceded issuance of said State Land Use Commission Special Permit, a public hearing shall be held by the appropriate Planning Commission upon due published notice, including actual written notice to the last known addresses of parties to said contested case and their counsel.

Report: No request for transfer has been made.

Condition 4: That full compliance with all applicable governmental requirements shall be rendered.

Report: 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 5: That the Applicant shall develop the Property in substantial compliance with the representations made to the Land Use Commission in obtaining the State Land Use Commission Special Permit. Failure to so develop the Property may result in the

**Central Maui Landfill Expansion FY2021 LUC Annual Report for SP97-390**  
**Page 4**

revocation of the permit.

Report: The Property has been developed as proposed to the Land Use Commission.

Condition 6: That the Applicant shall take appropriate mitigative measures to minimize erosion, and prevent cement products, oil, fuel, and other toxic substances associated with the use of heavy machinery from spilling or leaching into the ground.

Report: Landfill equipment is maintained regularly, replaced or repaired when needed; contractor equipment is in good operating condition with no leaking parts. The Spill Prevention and Containment Plan is updated as required for the NPDES Storm Water Pollution Control Plan. Landfill slopes are regularly inspected for erosion and repaired as necessary.

Condition 7: That the Applicant shall comply with the Department of Health Ambient Air Quality Standards, Hawaii Administrative Rules, Title 11, Chapter 59 and Air Pollution Control, HAR 11-60.

Report: Landfill operations comply with air quality regulations. Dust is controlled by paved roadways around the landfill and with regular spraying by the water truck for the unpaved roadways. Dust from cover soil is controlled by moisture conditioning. Tarp use decreases the use of cover soil which results in less dust. The landfill gas collection system is monitored and maintained regularly. Reporting and notifications to the Department of Health Clean Air Branch and Solid Waste Branch are made as required.

Condition 8: That the Applicant shall comply with the EPA's New Source Performance Standards.

Report: The County continues to sample and monitor the gas wells installed within the active landfill, Phases IV and V and at the closed Phases I and II. Surface emissions measurements are also taken. In addition, perimeter gas monitoring probes at Phases I and II and IV and V are sampled and metered. Gas well measurements are compiled in reports submitted to the Hawaii Dept. of Health, Clean Air Branch for review. Perimeter monitoring results are sent to the Hawaii Dept. of Health, Solid Waste Branch. A landfill gas collection system installed in Phases I and II pipes landfill gas to the flare in Phase IV where it is ignited. Design and construction of a gas collection system for Phase IV was funded in FY 2010 for \$2M. Cornerstone was the designer; gas well construction was completed by Goodfellow Bros. in June 2011. This work was part of a settlement agreement with the U.S.E.P.A. which also included a Supplemental Environmental Project that designed and installed wind turbines to produce electricity for landfill facilities. Phase V vertical and horizontal wells were installed in FY 2017 and Cornerstone provided compliance and O&M services. In FY 2020 their contract was for \$393,456 for all landfills; in FY 2021 billed O&M services were \$360,579.26 by TetraTech (formerly Cornerstone).

Condition 9: That the Applicant shall immediately stop work and contact the State Historic Preservation Division, Department of Land and Natural Resources and the Applicant's cultural specialist 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.

Report: No archaeological resources such as artifacts, shell, bone, charcoal deposits, human burial, rock or coral alignments have been discovered during any construction.

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

Report: Fire Dept. and Police Dept. are updated on gates for landfill access anytime and the County supervisor has keys for access to all locked gates.

Condition 11: That the Applicant 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 Applicant'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 the Executive Officer of the Land Use Commission.

Report: This annual report is submitted to meet this condition. With the construction of Phase V in 2012, the landfill had capacity to 2020. Construction of Phase V-B Extension in 2019 added 3-years capacity. Phase III-A, built in FY 2021, adds another 3 years. When Phase III-B is built in FY 2023, 10-years total additional capacity will be available.

Condition 12: That the Applicant shall utilize non-drinking water, to the extent possible, for grading, dust control, and irrigation of the landfill.

Report: A non-potable water production well on-site ensures that non-drinking water is used to meet the landfill's operational needs for dust control and grading.

Condition 13: That the Applicant shall reasonably ensure that windblown debris around the perimeter of the landfill, particularly within areas visible from the public right of way, are removed on a daily basis.

Report: The landfill applies leachate to the working face for litter control. Portable litter fences are installed near the working face to catch any litter from refuse trucks as they offload. A permanent, 30-foot litter fence is installed between Phases V-A and V-B and Pulehu Rd. Fencing was extended to Phase V-B Extension in FY 2021 and netting replaced on the 1,200-foot long existing fence during the extension work in FY 2021.

**Central Maui Landfill Expansion FY2021 LUC Annual Report for SP97-390**  
**Page 6**

Condition 14: That full compliance with the requirements of the State's Department of Health for sanitary landfill operation shall be rendered.

Report: Landfill operations are in compliance with the terms and conditions of Permit No. LF-0074-13 issued by the Department of Health and effective to February 23, 2023.

Condition 15: That the Applicant shall file a metes and bounds map and description of the new approximately 96-acre project area with the Land Use Commission and Maui Planning Commission.

Report: The maps and descriptions were included in the application for permit renewal.

Condition 16: That to the extent practicable, leachate generated at the landfill shall be returned to the landfill.

Report: Leachate, in compliance with the operating permit, generated at the active area is applied to the working face for increased compaction and litter control. A leachate recirculation plan was prepared by the landfill consultant and submitted to the Dept. of Health in 2013. The plan includes placing pipes in the waste to circulate leachate collected at the sump. Piping and trenching was done by Goodfellow Bros. in 2014 at Phase V-A. In FY 2016 a leachate recirculation system for V-B was constructed by Betsill Brothers including pump installation, controls, and manifold piping. The 2019 work by Betsill upgraded the recirculation system by routing leachate from the tank farm to the landfill and adding flow-meters to measure quantities both to and from the landfill.

Condition 17: That the County of Maui shall review implementation of improvements at the Pulehu Road/Hansen Road intersection as outlined in a Traffic Impact Analysis Report when warranted by the Department of Public Works.

Report: The Division is discussing with the County Dept. of Public Works roadway and intersection improvements at both the landfill entrance as well as Hansen Rd.

Condition 18: That to minimize impacts on animal species, the Applicant shall implement the following and if applicable consult with the U.S. Fish and Wildlife Service as deemed appropriate for further input on measures to avoid such impacts:

Hawaiian hoary bat: Woody plants greater than 15 feet tall should not be removed or trimmed during the Hawaiian hoary bat breeding season (June 1 to September 15). Additionally, barbed wire should not be used for fencing as part of the proposed action.

Report: No woody plants have been removed or trimmed and no barbed wire has been placed.

Blackburn's sphinx moth: A qualified biologist should survey areas of proposed

construction activities for Blackburn's sphinx moth and its host plants prior to initiation during the wettest portion of the year (usually November to April or several weeks after a significant rain) and immediately prior to construction. Any host plants with eggs, larvae and signs of larvae feeding should not be cut or disturbed.

Report: In December 2021 Robert Hobdy did a biological survey of an adjacent parcel and reported the following. "These moths and their larvae were looked for during the survey but not found. But without their specific host plants, none of which were present, there was almost no chance that these moths would be attracted to this project area, and thus no recommendations are necessary."

Hawaiian waterbirds and Hawaiian goose: To minimize adverse impacts such as predation and reduced reproductive success, the project should occur outside of the Hawaiian stilt breeding season (February through August). If the breeding period cannot be avoided, consultation with USFWS is recommended to develop measures to avoid impacts to listed species.

Report: No activity has occurred between February and August on the recently acquired 40-acre parcel.

Condition 19: Within one year of approval of this Fourth Amendment, the County shall identify County-owned agricultural property of similar land properties and equivalent acreage on Maui and submit a request to have it designated as IAL to compensate for the loss of the 22 acres of IAL associated with the CML Facilities Project.

Report: The County is in the process of complying with this condition. Acreage at the Kula Agricultural Park has been identified for the IAL designation and was presented to LUC staff on August 6, 2021. This area of IAL designation is intended to act as a "bank" for the County of Maui in the event that future land areas which may be designated as IAL are necessary to remove from IAL in order to provide regional services as determined by future needs of the community and the County's General Plan.

Upon receipt of the transmittal, it was determined by LUC staff that the proposal should be presented to the Maui Planning Commission prior to proceeding further. DEM is in the process of being scheduled for the Maui Planning Commission by the Department of Planning.

Condition 20: Upon restoration of closed phases of the CML and where safe and practicable to do so and if still designated as agriculture at that time, the County shall seek to make such lands available for future appropriate agricultural use in accordance with applicable state and federal guidelines and requirements.

Report: Future agricultural use and designation will be included in any Master Plan for the Central Maui Landfill.

**Central Maui Landfill Expansion FY2021 LUC Annual Report for SP97-390**  
**Page 8**

Condition 21: That the Applicant shall submit a petition for Declaratory Ruling to the LUC to withdraw the 22 acres of IAL from the IAL designation within one year of the LUC's Decision and Order for the Applicant's Fourth Amendment Request.

Report: CoM-DEM is in the process of complying with this condition. On August 6, 2021, CoM-DEM prepared and transmitted a petition for Declaratory Ruling. Consistent with the determination outlined in the response to Condition 19 above, the proposal is in the process of being scheduled for presentation to the Maui Planning Commission. Upon further analysis of HRS §205-50, in the context of the purpose and intent of Condition 21, CoM-DEM continues to make progress in meeting Condition 23.

Condition 22: That the Applicant shall instruct the construction employees during the pre-construction meeting or similar circumstance of the possibility of discovering funerary objects and burials during construction. Further, should burials be found, the Applicant shall consult with the SHPD and cultural and lineal descendants of the area to develop a reinterment plan and cultural preservation plan for proper cultural protocol, curation, and long-term maintenance.

Report: As a part of the grading permit application process and/or building permit process the Division submits project plans to SHPD for review and approval. No work commences without this approval; additionally, construction employees are informed of proper procedures in case any burials should be discovered.

Condition 23: That the Applicant shall commence the process to seek a district boundary amendment with the LUC for the approximately 95.659 acres of the total permitted area of the CML within five years of the LUC's Decision and Order for the Applicant's Fourth Amendment Request.

Report: CoM-DEM is in the process of complying with this condition. The County has issued a Notice to Proceed to a consultant to initiate a portion of the sub-consultant work for recently acquired land to be included in the for the preparation of an HRS 343 Environmental Impact Statement in support of forthcoming petition for DBA for the CML. Additionally, funding has also been requested for land acquisition and associated planning for the district boundary amendment process.

CoM-DEM and the Department of Planning have also presented the status, goals and requirements of the CML Special Permit and forthcoming DBA to the Maui County Council Infrastructure and Transportation Committee for the satisfaction of this condition on August 19, 2021.

**HANA LANDFILL  
STATE LAND USE COMMISSION  
FY2021 ANNUAL REPORT  
FOR SP08-402**

**Part 1: Project Summary**

**Groundwater Monitoring Plan**

Statistical work for a revised Groundwater Monitoring Plan using Upper Prediction Limits (UPLs) instead of control limits (CLs) was prepared by October 21, 2019 and submitted to the Dept. of Health (DOH) on November 7, 2019 with comments received on December 13, 2019. Concurrence by DOH with the hydrogeologist's response to comments was received on February 5, 2020. The Conceptual Site Model was drafted by the hydrogeologist by April 2020 for submittal of the Plan to DOH in September 2020. On April 8, 2021 DOH concurred with the approach in the Plan using the 2019 UPLs. The Plan included a memo describing the need to detrend sodium concentrations for HL-4. However, as the data accumulated, detrending appeared to be unnecessary so a conference call was held with DOH on July 7, 2021 to discuss detrending effects. The conclusion was reached to continue detrending until further data confirmed it was no longer necessary. On December 2, 2021, DOH, after reviewing the October data, concurred that detrending was no longer necessary for sodium at HL-4. On December 29, 2021 the consultant, CH2M Hill Engineers, submitted a technical memo to DOH, with data supporting the request to discontinue detrending dissolved sodium at HL-4.

In January 2021 all four wells exceeded their control limits for iron. The transition to UPLs from CLs was made in the July event which resulted in one exceedance of the 2019 upper prediction limits (UPLs) used in the Hana Landfill Groundwater Monitoring Plan approved by DOH in April 2021. This exceedance was limited to sodium in HL-4. In October an exceedance occurred for magnesium at HL-4. Following Section 5.2 of the Groundwater Monitoring Plan, retesting was done November 30, 2021. The sample met the UPL for magnesium; however, the field duplicate showed a slight exceedance.

**Office Trailer and PV Expansion**

The FY 2020 Capital Improvements Project budget included \$25,000 for a consultant to size an office trailer with an expansion of the photovoltaic capacity to run the new trailer. Brown & Caldwell was contracted and \$275,000 was budgeted in FY 2021; however, this budget was exceeded by the estimated construction cost. The lack of available utility hook-ups for the trailer added to installation costs so the project was not finalized.

**Greenwaste and Cover Soil**

In FY 2021 Amendment 4 was made for \$275,000 to the contract to furnish and deliver crusher run and deliver other materials to Hana Landfill and haul greenwaste. The contractor provides Hana Landfill with cover material from central Maui; and returns with greenwaste to be processed at the Organics Processing Facility at CML. This contract has provided cover soil to the landfill since the Olopawa cinder pit was closed to County operations in 2015 and returned to Hawaii Dept. of Land and Natural Resources.



**Part 2: Project Compliance**

Condition 1: That the State Land Use Commission Special Use Permit shall be valid until February 28, 2048, subject to further extensions by the Land Use Commission as required upon a timely request for extension filed at least one-hundred twenty (120) days prior to its expiration. The Maui Planning Commission shall make a recommendation to the Land Use Commission and may require a public hearing on the time extension.

Report: An application for renewal was submitted to the Planning Department early in FY 2018, a hearing was held before the Land Use Commission in Kahului, Maui on May 9, 2018, and a Decision and Order was issued on May 16, 2018 amending Condition Numbers 1, 2, 3, and 6.

Condition 2: That the conditions of this State Land Use Commission Special Use Permit shall be enforced pursuant to Sections 205-12 and 205-13, Hawai'i Revised Statutes. Failure to comply with one or more of the conditions herein shall result in a notice of violation issued by the appropriate enforcement agency, notifying the permit holder of the violation and providing the permit holder no more than sixty (60) days to cure the violation. If the permit holder fails to cure the violation within sixty (60) days of said notice, the appropriate enforcement agency shall issue an order which may require one or more of the following: that the violative activity cease; that the violative development be removed; that a civil fine be paid not to exceed One Thousand Dollars (\$1,000.00) per violation; and that a civil fine not to exceed Five Thousand Dollars (\$5,000.00) shall be issued if violation not cured within six (6) months of the issuance of the order. The order shall become final thirty (30) days after the date of its mailing or hand-delivery, unless written request for a hearing is mailed or delivered to the Department of Planning ("Department") within said thirty (30) days. Upon receipt of a request for a hearing, the Department shall specify a time and place for the permit holder to appear and be heard. The hearing shall be conducted by the Planning Director or the Director's designee in accordance with the provisions of Chapter 91, HRS, as amended.

Report: The County continues to work in compliance of all permit conditions of both the State and County Special Use permits.

Condition 3: That the subject State Land Use Commission Special Use Permit shall not be transferred without the prior written approval of the Land Use Commission. The appropriate Planning Commission shall make a recommendation to the Land Use Commission as necessary. However, in the event that a contested case hearing preceded issuance of said State Land Use Commission Special Use Permit, a public hearing shall be held by the appropriate Planning Commission upon due published notice, including actual written notice to the last known addresses of parties to said contested case and their counsel.

**Hana Landfill FY2021 LUC Annual Report for SP08-402**  
**Page 3**

Report: No request for transfer has been made.

Condition 4: That full compliance with all applicable governmental permits and requirements shall be rendered.

Report: 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. Landfill gas probes are monitored quarterly for methane; groundwater is sampled and tested quarterly. Use of a tarp as alternative daily cover, for four days a week out of the five the landfill is open, has continued with written approval by the Department of Health. NPDES permit conditions are met with the Storm Water Pollution Control Plan updated as required.

Condition 5: That the Applicant shall timely provide without any prior notice, annual reports to the Land Use Commission and the Department in connection with the status of the Project 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: The filing of this annual report for FY 2021 meets this requirement.

Condition 6: That the Applicant shall develop the property in substantial compliance with the representations made to the Land Use Commission in obtaining the State Land Use Commission Special Use Permit. Failure to develop the Property may result in the revocation of the permit.

Report: The property continues as a landfill with related improvements as proposed. Landfill improvements have included the installation of solar panels to power the office and illuminate the office yard. A fenced, cinder pad was prepared for the placement of roll-off containers to collect recyclables. Periodic collections occur for scrap metal and electronics which are promptly hauled to Hammerhead Metals Recycling or shipped off-island. The storm water system controls run-on and runoff to and from the landfill.

Condition 7: That the Applicant shall begin construction of the landfill storm water drainage retention basin within three (3) years from issuance of the Land Use Commission's decision and order. Construction shall include any improvements necessary to operate the landfill pursuant to all applicable laws and regulations.

Report: The Hana Landfill Basin System project was bid in August 2012 which met the three-year deadline. Construction began in March 2013 and finished in Sept. 2013. The concrete ditch and culvert is routinely cleaned and the grass swale is mowed. Sediment is removed from the detention pond, riprap channels, and spillway annually.

**Hana Landfill FY2021 LUC Annual Report for SP08-402**  
**Page 4**

Condition 8: That the Applicant shall take appropriate mitigative measures to minimize erosion, prevent cement products, oil, fuel, and other toxic substances associated with heavy machinery from spilling or leaching into the ground.

Report: Erosion is controlled by the maintenance of the grass cover which is mowed regularly on both the surrounding grounds and the portion of the landfill with intermediate cover. For the active area, erosion is controlled by sloping the soil covered workface so that run-off is directed to the concrete ditch. Cement products are not received at the landfill which does not accept construction and demolition material. Landfill equipment is maintained on a compacted cinder pad surface by the office. All fluids are drained directly into a bucket, then transferred to a sealed container. Fueling is done from a double-walled mobile tank according to procedures in the Spill Plan.

Condition 9: That the Applicant shall comply with Department of Health Ambient Air Quality Standards, Hawaii Administrative Rules, Title 11, Chapter 59 and Air Pollution Control, HAR 11-60.

Report: Minimal dust is produced by the cinder, crusher waste, and tarps used as cover. The buffer area next to the landfill is grassed and mowed regularly. The area around the landfill is wooded which keeps dust to a minimum. The water truck minimizes dust during dry conditions. The Landfill has a dedicated water meter off of Hana Highway and refilling of the water truck is done by staff as needed for dust control.

Condition 10: That the Applicant shall comply with the EPA's New Source Performance Standards.

Report: Four replacement landfill gas probes, constructed in 2012, are monitored quarterly and readings are reported to DOH. Tonnages do not meet NSPS thresholds.

Condition 11: That provisions shall be enacted to ensure emergency access to the sanitary landfill in case of fire or any other disaster.

Report: The Hana District Supervisor has keys to the landfill in case emergency access is needed. These keys are kept at the Hana Highways District Office. The Fire Department is located adjacent to the Highways District Office.

Condition 12: That the Applicant shall utilize non-drinking water, to the extent possible, for grading, dust control, and irrigation of the landfill.

Report: A non-drinking source has yet to be located. Dust is minimized due to the abundant vegetation surrounding and adjacent to the landfill. Rainfall provides dust control as it is frequent and light; storms produce heavier rains. The water truck with access to a dedicated water meter provides dust control during prolonged dry periods.

**Hana Landfill FY2021 LUC Annual Report for SP08-402**  
**Page 5**

Condition 13: That the Applicant shall ensure that windblown debris around the perimeter of the landfill, particularly within areas visible from the public right of way, be removed in a timely manner.

Report: The staff at the landfill maintains the grounds and removes any windblown litter or debris that may be found either away from or nearby the active area. Netting, anchored by poles, is placed downwind of the working face to prevent any litter from blowing away from the active area into the perimeter storm water collection channels. An ATV, purchased in FY 2018, provides transportation to the staff for litter control.

Condition 14: That full compliance with the requirements of the State's Department of Health for sanitary landfill operation shall be rendered.

Report: 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. Potential landfill gas migration is monitored quarterly and groundwater is sampled and tested quarterly.

Condition 15: That the Applicant inform the Department of Public Works of HAC's safety concerns, and further that the Applicant shall make its best effort to ensure daily operations are conducted in a safe manner. The Applicant shall undertake an engineering slope and soil stability analysis prior to construction within the three (3) year period.

Report: YKE, a geotechnical firm from Honolulu, met with the Hana Highways Division in December 2010 prior to taking soil samples and installing piezometers to assess water conditions at the cinder pit between December 2010 and June 2011. The consultants met with Hana Highways and the Solid Waste engineer in July 2011 to discuss operating issues prior to preparation of an Operations Plan for the cinder pit. The *Geotechnical Exploration & Evaluation Report, Hana Landfill Borrow Pit Slope Stability Analysis, Hana, Maui, Hawaii*, was finalized in August 2012. The *Operations Plan, Hana Landfill Borrow Pit, Hana, Maui, Hawaii* was finalized in October 2012. Solid Waste took over cinder pit operations from Hana Highways in July 2013. The contractor hired by Solid Waste has followed the recommendations and the plan to leave and secure the cinder pit at the end of 2016 was implemented. Cinder is no longer mined.

Condition 16: That a cultural assessment be conducted to address impacts to cultural resources resulting from the excavation of cinder ash and that the Office of Hawaiian Affairs shall be consulted prior to construction within the three (3) year period.

Report: Hana Pono, sub-consultant to Munikeyo and Hiraga, finalized their cultural assessment in October 2011 and a copy was sent to the Office of Hawaiian Affairs.

**Hana Landfill FY2021 LUC Annual Report for SP08-402**  
**Page 6**

Condition 17: That the Applicant execute a legal document with the State of Hawaii and the County of Maui regarding the removal of cinder ash from the Ka'eleku area.

Report: The County notified the Maui District DLNR in the fall of 2015 when it stopped mining and secured the road way with boulders and a locked gate. Staff periodically check to ensure the cinder pit area remains secured and blocked to access.

Condition 18: That mitigation measures be taken to address the visual height of the landfill by landscaping or other methods such as waste diversion, recycling, etc. within the ten (10) year period.

Report: The Master Plan finalized in 2013 by Brown & Caldwell addresses mitigation measures for the visual height concern, recycling being the primary one. The Hana Recycling Center opened in late January 2012. Cardboard, glass, plastic, & newspaper are collected in roll-off containers with used motor oil collected in drums with secondary containment inside a container. Roll-offs are hauled when full. Lush vegetation around the landfill, including forest, and its grassed slopes minimize its visual impacts.

Condition 19: That a recycling program begin immediately after permits are issued and/or the Department of Health grants approval. The recycling program may consider, but not be limited to, glass, aluminum, plastics, batteries, newspapers, cardboard, appliances, and oil.

Report: The Recycling Center was permitted Dec. 30, 2011 and a month later was open for customers. Event recycling is permitted at the center for the collection of scrap metal, appliances, tires, batteries, and computers and occurs on a periodic basis.

Condition 20: That the Applicant increase its groundwater monitoring at the landfill from semi-annually to quarterly.

Report: Since October 2009, groundwater monitoring has been done quarterly, now by CH2MHill. New, dedicated low flow pumps were installed in each well in July 2018.

Condition 21: That the Applicant shall periodically monitor the Property for the presence of miconia plants and eradicate any individuals found while they are still immature.

Report: The staff, while maintaining the grounds, checks for miconia. The brush cutter, weed eater, lawn mower, and tractor mower are all used to control vegetation growth at the landfill. The Miconia Task Force is a resource to be contacted in the event any miconia should be observed in and around the landfill. None has been detected to date.

**Hana Landfill FY2021 LUC Annual Report for SP08-402**  
**Page 7**

Condition 22: That the Applicant shall file a boundary interpretation request with the LUC staff to determine the location of the Agricultural and Conservation District boundary relative to Waste Area No. 2, as identified on the survey map dated September 8, 2007, within 30 days following the issuance of the Decision and Order granting the Application. The boundary interpretation request shall be accompanied by a metes and bounds survey prepared by a licensed professional land surveyor.

Report: Newcomer-Lee provided the boundary interpretation request with a metes and bounds survey within 30 days of the Decision and Order. This was confirmed by the Land Use Commission staff prior to the granting of the time extension in May 2018.

Condition 23: That the Applicant shall be prohibited from utilizing any Conservation District lands that may be present in Waste Area No. 2, as determined by the boundary interpretation prepared by the LUC staff, for the purposes of municipal solid waste disposal in connection with the Hana Landfill.

Report: Controlpoint Surveying completed the field staking of the Conservation District line in September 2010. However, subsurface waste was discovered in this area and a Conservation District Use permit (CDUP) was subsequently obtained in February 2016 in addition to a Special Management Area (SMA) permit from the Maui Planning Commission to remove the waste. This work began in 2017 and finished by the end of 2019 with confirmation soil sampling and testing reviewed and approved by DOH.