

**CENTRAL MAUI LANDFILL EXPANSION  
STATE LAND USE COMMISSION  
FY 2016 ANNUAL REPORT  
SP97-390**

**Part 1: Project Summary**

**Wind Turbine Generators**

Early in FY 2016 the three Bergey 10 kilowatt (KW) wind turbines installed in FY 2015 passed the County electrical inspection. The building permit work was also finalized. The turbines were energized by Maui Electric Co. in October 2015 with an in-service date of November 1, 2015. Together the three wind turbines produced 21,650 kilowatt hours as of June 30, 2016. The wind power produced offsets the landfill office use and is transferred to the grid. The project was under contractor warranty in FY 2016.

**Nonpotable Water Production Well**

Installation of the aboveground water storage tank, pump, piping and controls for the production well was completed in April 2016 by Oceanic Construction for \$296,920. The well is intended to produce enough water for landfill operation needs, primarily dust control, to eliminate the cost of purchasing water. Previous work included \$235,663.59 for well design, testing, and reporting with \$168,005 for drilling and installation.

**Phases IV, V, VI**

**Closure Design of Phase IV**

Closure design has been delayed until final elevations are reached.

**Preparation of Construction and Demolition (C&D) Debris Screening Procedures**

In anticipation of the Maalaea Construction and Demolition Landfill closing down in early FY 2017, procedures were established for screening construction and demolition waste. Forms were created and information provided on the web for customers prior to the Central Maui Landfill receiving C&D waste.

**Leachate Recirculation Phase V-B**

The second phase of leachate recirculation in Phase V-B was constructed by Betsill Brothers in FY 2016 for \$353,335. Work included installation of pump, controls and manifold piping and was completed in March 2016.

**Design of Phase V Vertical and Horizontal Gas Collection Systems**

Cornerstone Environmental Group, LLC designed vertical and horizontal gas collection systems for Phase V to be bid early in FY 2017.

**Design of Phase VI-A**

In FY 2015 the design of Phase VI-A was contracted to A-Mehr for \$247,200. Design documents were provided for County review in FY 2016 prior to submission to the Department of Health.

**Part 2: Project Compliance**

Condition 1: That the Land Use Commission Special Permit shall be valid until October 31, 2018, 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: This condition was approved by Land Use Commission at the February 19, 2009 meeting when the request for the Third Amendment was under discussion. Accordingly, the permit remains valid for two more years.

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 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. 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.

Report: No request for transfer has been made.

**Central Maui Landfill Expansion FY2016 LUC Annual Report for SP97-390**  
**Page 3**

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

Report: The landfill is compliant with federal laws and state regulations which govern landfill operations and environmental monitoring with both groundwater sampling and analysis; perimeter landfill gas sampling and measurement of methane and carbon dioxide; and, landfill gas collection and flaring. NPDES permit rules are followed for stormwater.

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 Use Permit. Failure to so develop the Property may result in the revocation of the permit.

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

Condition 6: That the Applicant shall begin construction of the landfill expansion within 12 months from issuance of the Land Use Commission's decision and order dated May 13, 2002. Construction shall include any improvements necessary to the operation of the landfill pursuant to all applicable laws and regulations.

Report: The construction of the entrance facility began on March 3, 2003.

Condition 7: 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 annually for the NPDES Storm Water Pollution Control Plan.

Condition 8: 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 the water truck for the heavily traveled roadways that remain unpaved. 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 flare is maintained regularly and its output is monitored on a routine basis. Reporting and notifications to the Department of Health Clean Air Branch and Solid Waste Branch are made as required.

## Central Maui Landfill Expansion FY2016 LUC Annual Report for SP97-390

### Page 4

Condition 9: That the Applicant shall comply with the EPA's New Source Performance Standards.

Report: The County continues to sample and meter the gas wells, installed within the landfill, and also the cap, with surface emissions measurements, at the closed Phases I and II. In addition, perimeter gas monitoring wells at I and II as well as Phases IV and V. 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 the emissions are ignited. Design and construction of a gas collection system for Phase IV was funded in FY2010 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. for \$5.1 million which also includes the design and installation of wind turbines to produce electricity for landfill facilities. Sampling and testing of gas is done on a routine basis by the County technician and reports are compiled by Cornerstone. Recent updates to the NSPS are followed.

Condition 10: That the Applicant shall immediately stop work and contact the State Historic 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 Use 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 11: 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. have keys to the gate to enter the landfill anytime.

Condition 12: 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 completion of Phase V-B construction in 2012, the landfill has projected capacity to 2020.

**Central Maui Landfill Expansion FY2016 LUC Annual Report for SP97-390**  
**Page 5**

Condition 13: That the Applicant shall utilize non-drinking water, to the extent possible, for grading, dust control, and irrigation of the landfill.

Report: The landfill recycles leachate for dust control. The non-potable water production well ensures that non-drinking water is used to meet the landfill's operational needs.

Condition 14: 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: Portable litter fences are installed near the working face to catch any litter from the trucks as they unload the municipal solid waste. The landfill staff use a vacuum to collect litter from around the entrance facility while crews from Kalima O Maui manually pick up litter along Pulehu Rd. and the grounds not reached by the vacuum. A permanent, 30 ft. tall litter fence has been installed between Phases V-A and V-B and Pulehu Rd.

Condition 15: 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-0091-04 issued by the Department of Health and effective to October 2014. That Permit is administratively extended until a renewal permit is issued.

Condition 16: That the Applicant shall clarify the entire acreage that is the subject of LUC Docket No. SP97-390 with the Maui Planning Commission and the LUC by filing an aerial photographic map with overlay and a site map clearly depicting the proper acreage of SP97-390.

Report: The maps were sent to the Maui Planning Commission and the LUC at the time they were requested.

Condition 17: That to the extent practicable, leachate generated at the landfill shall be returned to the landfill.

Report: In FY 2013, quantities of leachate, in compliance with the operating permit, generated at the active area were 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, which included pump installation, controls, and manifold piping. This work was completed in March 2016.