



HOUSE OF REPRESENTATIVES

STATE OF HAWAII  
STATE CAPITOL  
HONOLULU, HAWAII 96813

**MEMORANDUM**

TO: The Honorable Peter Carlisle, Mayor of the City and County of Honolulu  
FROM: Representative Cynthia Thielen (50<sup>th</sup> District: Kailua, Kaneohe Bay)  
DATE: May 7, 2012  
RE: Oahu Landfill Selection Sites

**QUESTION PRESENTED**

Whether Federal law and health and safety impacts prevent Ameron Hawaii Quarry in Kailua from being on the new municipal solid waste landfill site list of the City and County of Honolulu?

**BRIEF ANSWER**

Installing a new Oahu municipal solid waste landfill site (also referred to as "Landfill") at Ameron Hawaii Quarry in Kailua would negatively impact the water quality in Kailua's watershed and marsh lands, interfere with the U.S. Endangered Species Act's purpose, threaten the health and safety of Kailua residents, and irreparably damage the construction industry. The Ameron Hawaii Quarry in Kailua **should be removed** from the City and County of Honolulu's new landfill site list for the following reasons:

- 1) **Turning the Ameron Hawaii Quarry in Kailua into a municipal solid waste landfill site would likely threaten the water quality of Kawainui and Hamakua Marsh Complex, which is a core wetland and a Ramsar Wetland of International Importance.**
- 2) **Turning the Ameron Hawaii Quarry in Kailua into a municipal solid waste landfill site would likely interfere with the U.S. Endangered Species Act's purpose to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved.**

- 3) **Turning the Ameron Hawaii Quarry in Kailua into a municipal solid waste landfill site would threaten the health and safety of Kailua's residents and its visitors.**
- 4) **The Ameron Hawaii Quarry in Kailua would be unsuitable for a municipal solid waste landfill site for health and safety reasons, because the Ameron site is one of the wetter areas on Oahu adjacent to a wetland and residential waterways.**
- 5) **If a municipal solid waste landfill site occupies Ameron's Phase I site, Ameron Hawaii Quarry in Kailua would be forced to shut down due to Department of Health permit requirements and the construction industry would be damaged.**

### STATEMENT OF FACTS

The Ameron Hawaii Quarry in Kailua is adjacent to Kawainui Marsh and near a residential area. Kailua's Kawainui and Hamakua Marsh Complex is the largest remaining wetland in the State of Hawaii, encompassing nearly 830 acres. Hawaiian water birds on the endangered species list are prevalent in Oahu's Kawainui and Hamakua Marsh Complex. These marsh systems are connected to two waterways that empty into Kailua Bay and are surrounded by residential communities consisting of about 38,635 residents.<sup>1</sup> According to Ameron Hawaii, Kailua gets about 60 inches of rainfall per year.

### DISCUSSION

- I. **Turning the Ameron Hawaii Quarry in Kailua into a municipal solid waste landfill site would likely threaten the water quality of the Kawainui and Hamakua Marsh Complex which is a core wetland and Ramsar Wetland of International Importance.**

The Ameron Hawaii Quarry in Kailua should not be chosen as a municipal solid waste landfill site, because a Landfill within the Kapaa watershed will negatively impact the water quality in Kawainui Marsh, which is a core wetland and Ramsar Wetland of International Importance. The Kapaa watershed consists of 825 acres on the windward side of Oahu and includes the entire Ameron Hawaii Quarry site in Kailua. The Kapaa Stream, a part of the Kapaa watershed, separates Phase I and Phase II of the Ameron Hawaii Quarry and flows into Kawainui Marsh. Historically, Ameron Hawaii Quarry's

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<sup>1</sup> U.S. Census Bureau: <http://quickfacts.census.gov/qfd/states/15/1523150.html>.

runoff and discharges have contributed to high levels of turbidity entering into Kapaa Stream even with the Phase I quarry pit, which is used to collect runoff and prevent it from entering into the Kapaa Stream, in place.<sup>2</sup> In this case, if Ameron Hawaii Quarry is chosen as a Landfill, the Phase I pit will be used as a Landfill, not for runoff control and water collection.

Without such runoff control at a Landfill located at the current Ameron Hawaii Quarry site, it is highly likely that pollutants will enter into the Kapaa Stream during heavy rains and empty into Kawainui Marsh, which is designated as a core wetland and Wetland of International Importance under the Ramsar Convention.<sup>3</sup> Core wetlands are essential habitats for the larger populations of Hawaiian water birds that comprise the majority of the numbers prescribed for recovery.<sup>4</sup> On February 2, 2005, the global, intergovernmental Ramsar Convention designated the Kawainui and Hamakua Marsh Complex as a Wetland of International Importance for being the largest remaining emergent wetland in Hawaii, possessing both cultural importance and environmental significance for the existence of Hawaii's endemic and endangered water birds.<sup>5</sup>

Since the Advisory Committee on Landfill Site Selection has identified other alternative landfill sites that are not near core wetlands or Wetlands of International Importance, the Ameron site should be removed from the landfill site list of the City and County of Honolulu.

<sup>2</sup> Total Maximum Daily Loads for Total Suspended Solids, Nitrogen and Phosphorus in Kapaa Stream Kailua, Hawaii. State Department of Health Environmental Health Administration Environmental Planning Office (May 2007).

<sup>3</sup> Recovery Plan for Hawaiian Waterbirds, Second Revision. (May 2005) and [www.ramsar.org](http://www.ramsar.org).

<sup>4</sup> Recovery Plan for Hawaiian Waterbirds, Second Revision. (May 2005).

<sup>5</sup> [www.ramsar.org](http://www.ramsar.org).

**II. Turning the Ameron Hawaii Quarry in Kailua into a municipal solid waste landfill site would likely interfere with the U.S. Endangered Species Act's purpose to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved.**

The U.S. Endangered Species Act is designed to protect and preserve the ecosystems upon which endangered species and threatened species depend.<sup>6</sup> The Secretary of the Interior has published a list in the Federal Register of all species determined to be endangered species and threatened species. The following Hawaiian bird species are listed as endangered: Hawaiian Duck or Koloa Maoli, Hawaiian Coot or Alae Keokeo, Hawaiian Common Moorhen or Alae Ula, and Hawaiian Stilt or Ae'o.<sup>7</sup>

Hawaiian water birds on the endangered species list are prevalent in Oahu's Kawainui Marsh where they live near the proposed landfill site at the Ameron Hawaii Quarry in Kailua. In order to restore the population of these Hawaiian water birds and remove them from the endangered species list, the Kawainui Marsh habitat needs to be preserved and protected against threats posed by contaminants coming from landfill sites. As a result, the Advisory Committee on Landfill Site Selection should remove the Ameron Hawaii Quarry in Kailua as a prospective landfill site to satisfy the U.S. Endangered Species Act's purpose to protect and preserve the Kawainui Marsh ecosystems upon which Hawaii's endangered water birds depend.

**III. Turning the Ameron Hawaii Quarry in Kailua into a municipal solid waste landfill site would threaten the health and safety of Kailua's residents and its visitors.**

The location of the Ameron Hawaii Quarry in Kailua makes it unsuitable for a municipal solid waste landfill site, because it poses health and safety issues for Kailua's residents and visitors by being in proximity of five schools, a medical center, residential parcels, and a wetland that empties into two canals adjacent to residential communities and eventually into a frequently visited and used Kailua Bay.

<sup>6</sup> 16 U.S.C. § 1531(b).

<sup>7</sup> 16 U.S.C. § 1533(c) and Federal Register, Vol. 77, No. 12, January 19, 2012.

The Ameron Hawaii Quarry in Kailua is within one mile of five schools: Hawaii Pacific University Hawaii Loa Campus is 0.2 miles away from the site, Le Jardin Academy is 0.3 miles away from the site, Kaneohe Elementary is 0.7 miles away from the site, Castle High School is 0.9 miles away from the site, Kalaheo High School is 1.0 miles away from the site. Castle Medical Center is only 0.8 miles away from the proposed site. According to Ameron Hawaii, there are 270 residential parcels located within a half mile of the site. The best way to ensure that the environment and residential areas surrounding the Ameron Hawaii Quarry are protected from health and safety concerns is to avoid building a Landfill at the Ameron site.

**IV. The Ameron Hawaii Quarry in Kailua would be unsuitable for a municipal solid waste landfill site for health and safety reasons, because the Ameron site is one of the wetter areas on Oahu.**

According to Ameron Hawaii, the quarry has almost two decades of 24-hour rainfall data, showing it typically gets over 60 inches of rainfall per year and 24-hour storm events exceeding 25 inches of rain. Since the Ameron Hawaii Quarry site is one of the wetter sites on the list provided by the Advisory Committee on Landfill Site Selection and if chosen as the new landfill site, it is highly likely that landfill pollutants will discharge into the Kawainui Marsh area due to rain storms and empty into Kailua's waterways, such as the canal and bay, that are adjacent to residential communities and public beaches. For instance, the Waimanalo Gulch location is on the drier Leeward side of Oahu in comparison to the wetter Windward side of the island, and, on January 12, 2011, the Gulch was forced to discharge large amounts of pollutants into the ocean after a heavy rainfall. Discharges on the wetter side at Ameron Hawaii Quarry could be expected to be numerous and environmentally damaging.

The Department of Health has expressed concerns about the fractured rock at the Ameron Hawaii Quarry site. These fractures allow landfill contaminants to leach into Kailua's groundwater and Kawainui Marsh.

Therefore, the fact that the Ameron site is one of the wetter areas on Oahu makes this site more unsuitable for a Landfill due to health and safety reasons, in comparison to other prospective sites on Oahu.

**V. If a municipal solid waste landfill site occupies Ameron's Phase I site, Ameron Hawaii Quarry in Kailua would be forced to shut down due to Department of Health permit requirements thereby negatively impacting the construction industry.**

According to Ameron, throughout the quarry's remaining lifetime, mining will take place in both Phase I and II. Phase I consists of 226 acres containing 18 million tons of rock, which would not be accessible until approximately 2040. Phase I is primarily used for crushing, screening, and stockpile operations. Currently, Phase I also uses its space for waste water storage consisting of over one billion gallons of water. Phase II is used for aggregate production and has no room for waste water storage. Without the Phase I pit, Ameron cannot satisfy its National Pollutant Discharge Elimination System permit requirements requiring waste water discharge to be contained and treated in such a facility and thus cannot operate as a quarry.<sup>8</sup>

Without Ameron Hawaii Quarry in Kailua there only remains one other quarry on Oahu to generate Grade A rock, and it alone cannot meet Oahu's rock demands. According to Ameron, if a Landfill were placed in the quarry, the construction industry would experience a 70% decline in rock availability and 15% reduction in concrete production from Ameron Hawaii resulting in off-island imports increasing construction costs. This would have a significant impact on much-needed infrastructure upgrades and start-up of the rail project. Moreover, according to Ameron, if Ameron Hawaii were to downsize its operations due to a Landfill at the quarry, 75 to 100 jobs would be in jeopardy.

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<sup>8</sup> See, Permit No. HI 0020796, Authorization to Discharge Under the National Pollutant Discharge Elimination System.

## VI. Conclusion

Turning the Ameron Hawaii Quarry in Kailua into a municipal solid waste landfill site would likely have detrimental effects on Kailua's Kawainui Marsh, its waterways, and its residential communities, thereby threatening the existence of an internationally recognized marsh and five federally recognized endangered species along with the health and safety of residents. In addition, the closure of Ameron Hawaii is inevitable if chosen for a Landfill. This would negatively impact Hawaii's construction industry by halting much-needed infrastructure upgrades and start-up of the rail project. Therefore, it is in the City and County of Honolulu's best interest to remove the Ameron Hawaii Quarry in Kailua from the updated landfill site list.

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