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CITY AND COUNTY OF HONOLULU

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December 2, 2024

Dear Friend:

In preparation for the upcoming announcement and discussion regarding the City's proposed site for a landfill to replace the Waimānalo Gulch Sanitary Landfill, our administration prepared the attached four-page information sheet regarding the long history of landfill siting on O'ahu and the challenges with selecting the best site for our residents, environment and waste operations.

As explained in the attached document, there are no universally acceptable landfill sites on O'ahu, with all alternatives having their pros and cons. To arrive at a proposed site, our City team looked at laws, regulations, rules, restrictions and equities to arrive at three potential paths for siting a landfill on O'ahu. The three paths and the order of pursuing each path to select and establish a landfill on O'ahu will be discussed at our press conference on December 10, 2024.

We trust the information provided in the attached document will assist you in understanding the history and challenges of siting a landfill on O'ahu and lay a complete foundation for the upcoming discussion on December 10, 2024.

Sincerely,

Rick Blangiardi
Mayor

Attachment

MAYOR'S MESSAGE 211

The City and County of Honolulu to Identify New Landfill Site on O'ahu before December 31, 2024

The City and County of Honolulu's (City) Department of Environmental Services (ENV) is required to name a new landfill site by December 31, 2024 to replace the Waimānalo Gulch Sanitary Landfill (WGSL). In 2021, Mayor Blangiardi appointed a Landfill Advisory Committee (LAC) to evaluate potential landfill sites using a diverse set of criteria, and ENV commenced a landfill siting study in 2022. The study is the basis for naming a new landfill site and moving forward with technical analyses in support of design and permitting, including the preparation of an environmental impact statement (EIS), acquisition of land, and construction of the new landfill.

By way of history, ENV oversees the City's solid waste management system, which includes the Honolulu Program of Waste and Energy Recovery (H-POWER), WGSL, three transfer stations, seven collection yards that service over 200,000 residential accounts, seven residential convenience centers, and other critical waste processing operations, including green waste composting, white goods processing and refrigerant recovery, bulky item appointment pickup, and household hazardous waste collection and disposal.

On an annual basis, ENV manages approximately 1.2 million tons of recyclables and residential and commercial waste generated on O'ahu – 650,000 tons of which is sent to H-POWER for metals recovery and electricity generation. Approximately 225,000 tons of municipal solid waste (MSW), H-POWER ash and residue, and other non-combustible, non-recyclable and/or special waste materials are disposed at the WGSL annually.

The Waimānalo Gulch Sanitary Landfill (WGSL)

The WGSL is located at 92-460 Farrington Highway, Honouliuli, 'Ewa, O'ahu, and has been in operation since 1989. The landfill was initially designed and permitted to accept O'ahu's refuse for approximately 20 years. WGSL was expanded twice to utilize remaining landfill space. WGSL is located on agriculturally-zoned land, requiring a Special Use Permit (SUP) from the State of Hawai'i Land Use Commission (LUC). A LUC SUP extension was issued in 2019.

2019 LUC: Findings of Fact, Conclusions of Law and Decision and Order (D&O)

On June 10, 2019, the Honolulu Planning Commission (PC) issued its Findings of Fact, Conclusions of Law, Decision and Order recommending the State LUC approve an extension to the SUP for WGSL. On November 1, 2019 the LUC issued its Findings of Fact, Conclusions of Law, Decision and Order Approving with Modifications the City and County of Honolulu Planning Commission's Recommendation to Approve Special Use Permit and Certificate of Service (D&O) and SUP SP09-403[1]. The D&O provided that the WGSL shall close no later than March 2, 2028 and shall not accept any form of waste after March 2, 2028. The D&O also provided that, no later than December 31, 2022[2], ENV shall identify an alternative landfill site that may be used upon closure of WGSL and give written notice to the PC and LUC, providing semi-annual reports to the PC and LUC regarding landfill siting efforts and WGSL operations. These reports presented at public hearings can be found on ENV's website at: **www8.honolulu.gov/env/ref/res-landfill-status/**

2020 Act 73 Landfill Siting Restrictions

In the 2020 session, the Hawaii State Legislature passed Act 73, which became law on September 15, 2020. Act 73 added new landfill siting restrictions found in Hawai'i Revised Statutes [HRS] Sections §183C-4 and §342H-52. The restrictions are summarized as follows:

- Requires no less than a 1/2 mile buffer zone around residences, schools, and hospitals for the construction, modification, or expansion of a waste or disposal facility; and
- Prohibits any waste or disposal facility from being located in a conservation district, except in emergency circumstances, to mitigate risks to public safety and health.

Other Restrictions on Siting a Landfill on O'ahu

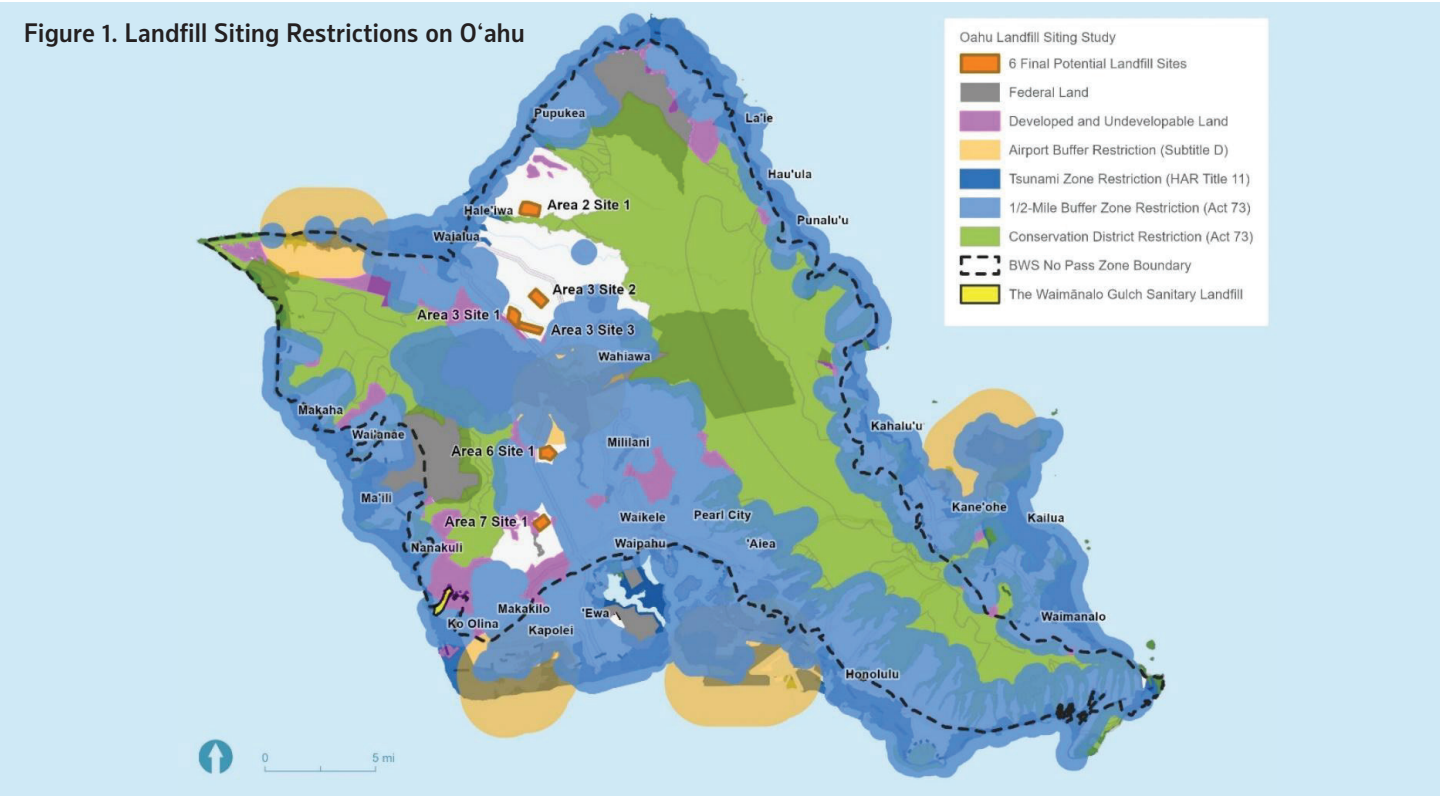
In addition to Act 73, the following restrictions apply to siting a new landfill on O'ahu:

- **Subtitle D (Federal Subtitle D of the Resource Conservation and Recovery Act [RCRA]):** Owners/Operators .of any airport runway end used by turbojet aircraft, or within 5,000 feet (1,524 meters) of any airport runway end used by only piston-type aircraft, must demonstrate that the units are designed and operated so that the landfill does not pose a bird hazard to aircraft. Landfills are also restricted from wetlands, floodplains, earthquake fault areas, seismic impact zones, and unstable land areas.
- **HAR Title 11 (Hawai'i Administrative Rules Title 11):** New municipal solid waste landfills and lateral expansions shall not be located in possible tsunami inundation areas.
- **Developed and Undevelopable Lands:** Lands previously zoned or approved for development.
- **Federal Lands:** Lands under Federal control, mostly military, require congressional action to allow their use by the City for a landfill.

[1] Special Use Permit No. SP09-403. The original SUP covered 60.5 acres, but was expanded over the years

[2] As discussed on page 5, the December 31, 2022 deadline to identify a new landfill site was subsequently extended to December 31, 2024

Figure 1. Landfill Siting Restrictions on O'ahu



2021-2022 Landfill Advisory Committee (LAC)

By way of history, ENV completed a landfill siting study in 2012 on the belief that WGSL could not be expanded a third time due to the limited remaining developable land at the site. The 2012 *Report of the Mayor's Advisory Committee on Landfill Site Selection (MACLSS)*[3] siting study included a committee (Mayor's Landfill Site Selection Committee) to score and rank several sites and recommend 11 final sites. In a 2017 *Assessment of Municipal Solid Waste Handling Requirements for the Island of O'ahu*[4], ENV re-evaluated the landfill sites recommended in 2012 to account for updated waste generation rates on O'ahu and added volumes processed at the expanded H-POWER facility. Neither the 2012 nor 2017 landfill site recommendations were acted on at the time. In 2020, ENV revisited the landfill siting efforts completed in 2012 and 2017 and, considering Act 73, initiated the 2021-2022 landfill siting study.

In September 2021, Mayor Blangiardi appointed a nine-member LAC (later reduced to eight members due to one member's unavailability) to evaluate and score six potential new landfill sites. The LAC only considered sites that meet Act 73 and other siting restrictions. Federal lands were not considered by the LAC. Between October 2021 and June 2022, eight public LAC meetings were held, in accordance with the Sunshine Law (HRS, Part 1, Chapter 92), to learn about the solid waste programs on O'ahu, provide input on the siting evaluation and scoring process, and complete scoring of potential landfill sites. Proceedings of the LAC are available on ENV's website at: **www8.honolulu.gov/env/ref/new-landfill-siting/.**

2021 – 2022 Red Hill Fuel Leak and Drinking Water Contamination

In November 2021, a fuel leak at the Red Hill Bulk Fuel Storage Facility operated by the United States Navy resulted in jet fuel entering the aquifer under the facility and entering the Navy's water supply tunnel. A lengthy and costly clean-up ensued. The safety of O'ahu's water supply was seriously eroded during this crisis, and there evolved a general public awareness that O'ahu's water supply is vulnerable to contamination and needs to be protected. In response, the Honolulu Board of Water Supply (BWS) shut off several of their water supply wells, including the Halawa Shaft, to mitigate potential contamination from the fuel plume.

2021 BWS Testifies to LAC

During the LAC siting evaluation process, communication occurred between ENV and BWS regarding the LAC ongoing landfill siting efforts. The BWS indicated that it did not support the siting of a new landfill at any site within its designated No Pass Zone (NPZ). The NPZ is a geographic area in the interior of O'ahu where the underlying groundwater aquifer is not protected from surface-level contamination by a confining geologic formation known as caprock. The BWS, including its Manager and Chief Engineer and its Head of Water Quality Division, made a presentation to the LAC at their December 14, 2021 meeting and expressed concerns about the six sites being evaluated because all were located directly over O'ahu's aquifer and the risk may be high for landfill contaminants to be released into the aquifer[5]. As a result of the BWS testimony, the LAC members expressed concerns regarding all six proposed sites within the NPZ and noted that federal lands were not considered. The LAC approved a motion to not recommend any of the six landfill sites due to proximity to the NPZ.

[3] https://www8.honolulu.gov/env/wp-content/uploads/sites/29/2023/10/MACLSS_REPORT_FINAL_092512.pdf
[4] https://www8.honolulu.gov/env/wp-content/uploads/sites/29/2024/10/Assessment-of-Municipal-Solid-Waste-Handling-Requirements-for-the-Island-of-Oahu-Nov.-2017.pdf
[5] Subsequently, in a letter dated November 16, 2022, BWS disapproved all six potential sites.

2022 LAC Final Report Ranked but Did Not Select a Landfill Site

The LAC issued its final report in June 2022[6]. While the report ranked the six potential landfill sites evaluated by the LAC, it recommended none of the sites be selected due to their location in the BWS NPZ. Instead, the LAC recommended that ENV request the LUC extend the December 31, 2022 deadline to name a new landfill site, evaluate sites outside the NPZ, including Federal lands, seek to modify or rescind Act 73, and consider using eminent domain to acquire a new landfill site.

2022 ENV Files Request for Deadline Extension to PC

On December 22, 2022, ENV submitted an application request to the PC to modify the WGSL's SUP conditions setting a December 31, 2022 deadline for ENV to identify an alternative landfill site. ENV requested a two-year extension to December 31, 2024 to re-evaluate various siting options per the LAC recommendations.

2023 City works with U.S. Navy to Identify Potential Federal Lands

In 2023, Mayor Blangiardi and Managing Director Michael Formby met with Navy leadership at USINDOPACOM to discuss the potential use of federal lands not in the BWS NPZ, including the Waipi'o Peninsula and the Iroquois Point areas. Portions of these areas are located outside the NPZ. Waipi'o Peninsula is the present location of the City's Waipi'o Soccer Complex and the Iroquois Point area is an operational naval magazine.

2023 Mayor Blangiardi Promises No Landfill on the Wai'anae Coast

Although federal land on the Wai'anae Coast is outside the NPZ (located on a portion of the Lualualei Naval Magazine), Mayor Blangiardi publically committed that the next City landfill would not be located on the Wai'anae Coast and the Lualualei site was removed from consideration. Mayor Blangiardi's decision was based on equity and operational impact.

2024 U.S. Navy Declines Use of Federal Lands for Operational Reasons

On April 12, 2024, the Navy informed Mayor Blangiardi that after much deliberation and considerable efforts to reconcile concerns, the military was unable to support the development of a landfill on the Waipi'o Peninsula property. The Navy cited mission critical operations and training activities in the vicinity of Waipi'o Peninsula. Both the Waipi'o Peninsula and Iroquois Point areas were removed from consideration for similar reasons.

2024 May – PC Grants City a Two-Year Extension to Name New Landfill Site

The PC heard ENV's 2022 request for an extension on June 28, 2023 and held a contested case hearing to take testimony on October 18, 2023 and November 1, 2023. The PC issued its D&O on May 29, 2024 and forwarded it to the LUC for decision making.

2024 August – LUC Grants City a Two-Year Extension

On August 23, 2024, the LUC granted ENV's request to extend the December 31, 2022, deadline to name a landfill site to December 31, 2024, subject to the following conditions:

- By no later than December 31, 2024, ENV shall identify an alternative landfill site and provide written notice to the PC and LUC; and
- ENV shall report quarterly to the PC, in-person, the efforts it has taken and plans to take to identify an alternative landfill site by December 31, 2024, and answer questions from the Commission and community.

2023-2024 Evaluation of Modifications to Act 73 on Availability of Lands

Per the LAC recommendations and commitment from Mayor Blangiardi, between 2023 and 2024, in addition to federal lands under consideration by the Navy, the City re-evaluated potential lands that might be available if Act 73 were amended. Based on this evaluation, 11 sites were identified as potential areas to site a landfill *(see Figure 2, next page).*

The results of this evaluation were documented in an October 2024 Supplemental Technical Memorandum[7]. Some sites were removed due to being too small (Pali Golf Course, Waiāhole Forest Preserve and Farmland [Waiāhole Homestead Road], and Royal Hawaiian Golf Club) or being in an airport flight path (Hawai'i Prince Golf Club).

2024 December – Planned New Landfill Site Identification

Based upon the studies, evaluations, consultations and the recommendations of the LAC, the City plans to identify the proposed site of the next landfill in December 2024. Following identification of the site, the City will begin the EIS process, followed by acquisition, landfill design, obtaining permits, and construction. The City will respond to comments and questions regarding the proposed site and explain its rationale for selection.

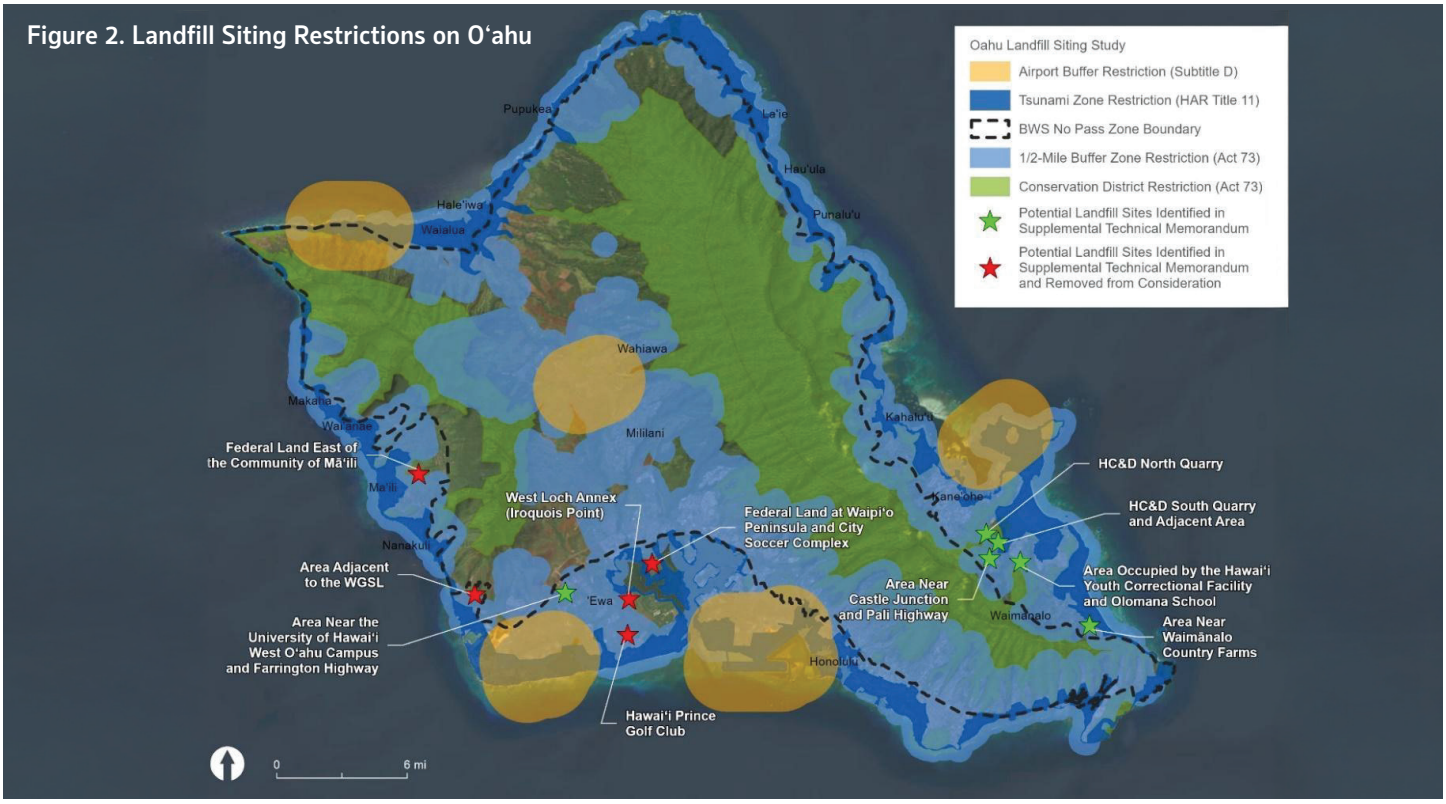
Improvements in Waste Diversion

The next City landfill is planned to handle 20 years of waste, which includes the current rates of H-POWER ash disposal, other non-burnable MSW disposal, periodic diversion of MSW due to planned/unplanned H-POWER outages, and disposal of all Construction and Demolition (C&D) waste that currently goes to the PVT landfill. The City is continuously evaluating alternative recycling and diversion opportunities to limit the quantity of waste requiring landfill disposal. Currently, the City provides several recycling programs, including residential curbside recycling, household hazardous waste drop-off events, and the recycling of white goods (appliances), tires, batteries, metal, green waste, and other household wastes. With the support of recent legislation, the City is expanding accepted material in the residential curbside collection program to include food waste and manufactured compostable material in 2025. The City is also pursuing H-POWER

[6] https://www8.honolulu.gov/env/wp-content/uploads/sites/29/2023/10/OLSS%20and%20LAC%20Final%20Report%2020220627_COMBINED%20r1.pdf

[7] https://www8.honolulu.gov/env/wp-content/uploads/sites/29/2024/10/OLSS-Supplemental-Technical-Memorandum-FINAL-1.pdf

Figure 2. Landfill Siting Restrictions on O‘ahu



ash recycling. Permit applications have been submitted to DOH, design is initiated and construction funds are appropriated. Additionally, with the anticipated closure of the PVT Integrated Solid Waste Management Facility (C&D landfill) in the next few years, the City is looking into recycling alternatives and diversion opportunities for C&D waste.

FAQs

1. **Does the current landfill at Waimānalo Gulch have capacity beyond 2028?**

   Potentially, to 2035. The 2019 LUC order requires the WGSL to close by March 2028.

2. **Is it possible to ship O‘ahu’s waste to another location?**

   Potentially, yes, subject to environmental, permitting, port availability, cost and policy concerns.

3. **Will there ever be a time when O‘ahu does not need a landfill?**

   Advances in waste conversion technologies, improved waste separation and processing, and increased source reduction efforts will reduce types and amounts of waste. Landfills are critical infrastructure, especially in an emergency, for disaster debris management. Landfills are also a requirement of Department of Health solid waste permits for the continued operation of H-POWER, WWTPs and recycling facilities. Landfills are also important backup for when these facilities are closed for repair and maintenance.

Glossary of Acronyms

BWS: Honolulu Board of Water Supply

C&D: Construction and Demolition

D&O: Decision and Order

DOH: State of Hawai‘i Department of Health

EIS: Environmental Impact Statement

ENV: City and County of Honolulu’s Department of Environmental Services

H-POWER: Honolulu Program of Waste and Energy Recovery facility in Kapolei

LAC: City’s Landfill Advisory Committee

LUC: State of Hawai‘i Land Use Commission

MACLSS: 2012 Report of the Mayor’s Advisory Committee on Landfill Site Selection

MSW: Municipal Solid Waste

NPZ: Board of Water Supply’s No Pass Zone

PC: Honolulu Planning Commission

SUP: Special Use Permit from the State of Hawai‘i Land Use Commission

WGSL: Waimānalo Gulch Sanitary Landfill

WWTPs: Wastewater Treatment Plants