

**DECLARATION OF ROGER W. BABCOCK JR.**



I, ROGER W. BABCOCK JR., hereby declare as follows:

1. I am the Director for the Department of Environmental Services, City and County of Honolulu ("Department of Environmental Services").
2. I make this declaration based upon personal knowledge in support of the Department of Environmental Services' Application to Modify State Special Use Permit ("SUP") No. 2008/SUP-2 (SP09-403) by modifying (1) Condition No. 1 of the Planning Commission, City and County of Honolulu's ("Planning Commission") Findings of Fact, Conclusions of Law, and Decision and Order, dated June 10, 2019 and (2) Condition No. 5 of the State of Hawaii, Land Use Commission's ("LUC") Findings of Fact, Conclusions of Law, and Decision and Order Approving with Modifications the City and County of Honolulu Planning Commission's Recommendation to Approve Special Use Permit, certified on November 1, 2019, by extending the December 31, 2022 deadline to identify an alternative landfill site ("Application to Modify").
3. Attached hereto as Exhibit "A" is a true and correct copy of the Planning Commission's Findings of Fact, Conclusions of Law, and Decision and Order, dated June 10, 2019 ("Planning Commission's 2019 Decision").
4. Attached hereto as Exhibit "B" is a true and correct copy of the LUC's Findings of Fact, Conclusions of Law, and Decision and Order Approving with Modifications the City and County of Honolulu Planning Commission's Recommendation to Approve Special Use Permit, certified on November 1, 2019 ("LUC's 2019 Decision").

5. Attached hereto as Exhibit “C” is a true and correct copy of the Board of Water Supply’s (“BWS”) letter to the Department of Environmental Services dated November 16, 2022.

6. Attached hereto as Exhibit “D” is a true and correct copy of the Landfill Advisory Committee’s final report titled “O’ahu Landfill Study & Landfill Advisory Committee Recommendations”, dated June 2022, without Appendices (A-E).

7. The PDF containing the final report with appendices is available from the Department of Environmental Services’ website

(<https://www.honolulu.gov/opala/newlandfill.html>), or via the following URL:

[https://www.honolulu.gov/rep/site/env/envref/envref\\_docs/OLSS%20and%20LAC%20Final%20Report%2020220627\\_COMBINED%20r1.pdf](https://www.honolulu.gov/rep/site/env/envref/envref_docs/OLSS%20and%20LAC%20Final%20Report%2020220627_COMBINED%20r1.pdf)

8. Attached hereto as Exhibit “E” is a true and correct copy of the approved minutes of the Landfill Advisory Committee’s (“LAC”) December 14, 2021 meeting.

9. Attached hereto as Exhibit “F” is a true and correct copy of the Department of Environmental Services’ letter to the BWS, dated November 3, 2022.

10. Attached hereto as Exhibit “G” is a true and correct copy of a chart containing data collected by the Department of Environmental Services regarding Municipal Solid Waste Stream on O’ahu (for 2017-2021), which can also be found on the Department of Environmental Services’ website:

<https://www.honolulu.gov/opala/resources/rates-and-data.html>.

11. Attached hereto as Exhibit “H” contains a true and correct copy of Honolulu Program of Waste Energy Recovery’s (“H-POWER”) Solid Waste

Management Permit No. IN-0049-11 issued by the Department of Health. The Department of Environmental Services is currently awaiting the permit's renewal.

12. Attached hereto as Exhibit "I" is a true and correct copy of Covanta Honolulu Resource Recovery Venture, LLC's ("Covanta") annual summary report for fiscal year 2021 through 2022 (consisting of Attachments A to D), which was sent to the Solid and Hazardous Waste Branch, Hawaii State Department of Health. Covanta is the Department of Environmental Services' contractor that operates H-POWER.

13. Attached hereto as Exhibit "J" is a true and correct copy of a letter to the editor published in the Honolulu Star-Advertiser on December 7, 2022, which was authored by State Senator Maile Shimabukuro and State House Representative Darius Kila, which was obtained from the Star-Advertiser's website.

14. (1) 9-2-03:72 and 73 are the Tax Map Key ("TMK") numbers referenced in the applications and records of the Planning Commission and LUC, relating to their 2019 Decisions. Recently, it came to the attention of the Department of Environmental Services that the Property is also identified by TMK numbers (1) 9-2-050:005 and 006. Nevertheless, the Property at issue remains the same.

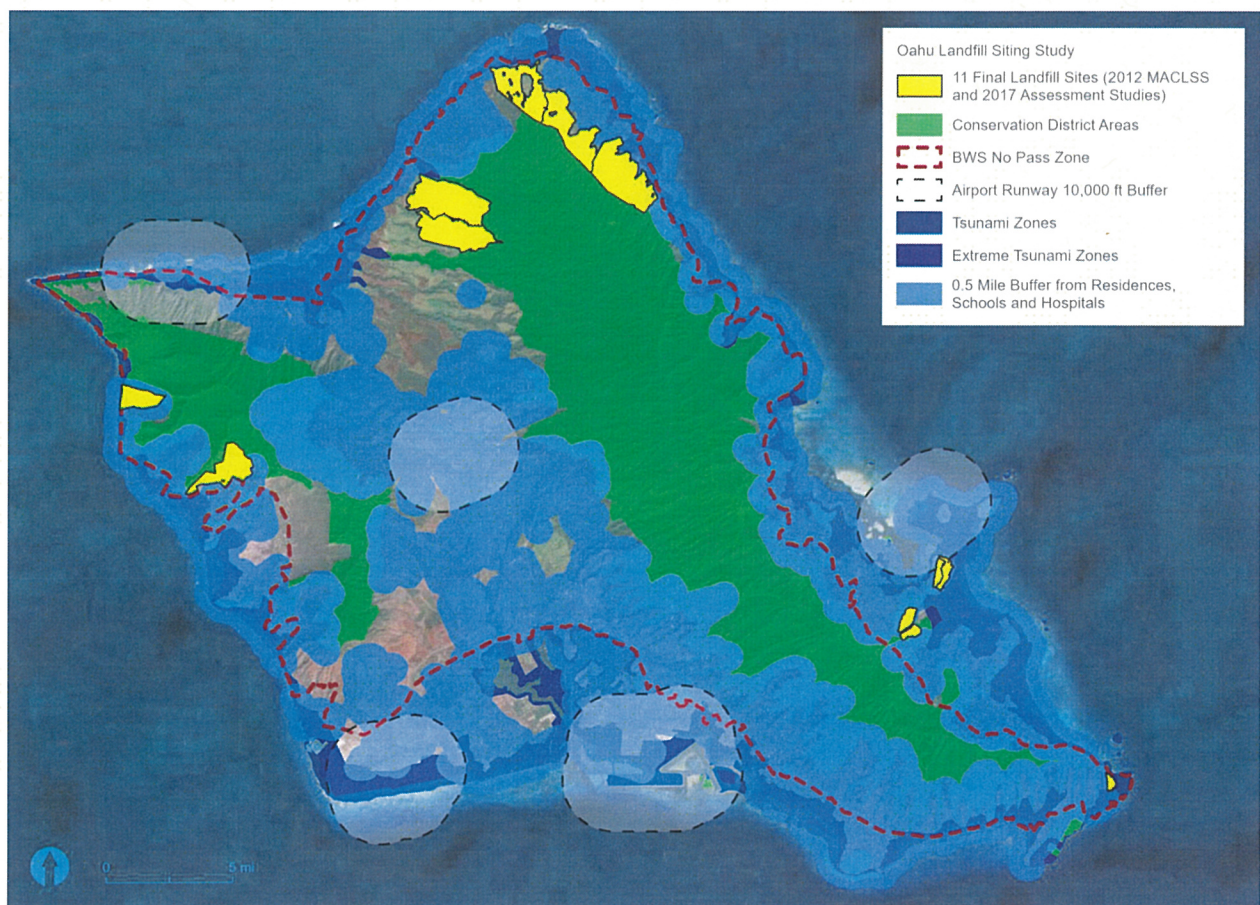
15. The Waimanalo Gulch Sanitary Landfill ("WGSL" or "Landfill") is the only permitted public municipal solid waste ("MSW") landfill on the island of O'ahu and the only permitted repository for the ash and residue produced by H-POWER.

16. Developed lands are lands where a major building(s) exists, and undevelopable lands are lands that already have a planned development in place. Federal lands are lands owned by the federal government. Given the short timeline to identify a new site, the Department of Environmental Services removed federal lands



from consideration because of the long lead-time it would take to negotiate and acquire federal land. The Department of Environmental Services removed developed and undevelopable lands from consideration because those potential sites were too small or also restricted by Act 73's one-half mile buffer zone.

17. In Figure 3 (on the following page), the proposed landfill sites outside of the No Pass Zone (shown as yellow areas outside of the area demarcated by the red dotted line) were eliminated by Act 73. When the No Pass Zone and Act 73 are applied as restrictions and federal lands are removed from consideration, there are zero potential new landfill sites on O'ahu.



**Figure 3**



18. The LAC was established in accordance with Section 4-103 of the Revised Charter of the City and County of Honolulu 1973 (Amended 2017 Edition) and as an advisory committee, its function was limited to counsel and advice.

19. Consistent with the requirements of the LUC's 2019 Decision, the Department of Environmental Services has continued its efforts to use alternative technologies to provide a comprehensive waste stream management program. Over the years, the Department of Environmental Services has been able to divert more and more waste from the WGSJ to H-POWER.

20. In Calendar Year 2010 approximately 1,214,904 tons of waste was generated on O'ahu. Of that amount, the Landfill received 163,736 tons of MSW and 179,946 tons of ash and residue from H-POWER (for a combined total of 343,682 tons). According to Department of Environmental Services' data, the landfill diversion rate for 2010 was 71.7%

21. In Calendar Year 2020, approximately 1,210,281 tons of waste was generated on O'ahu. Of that amount, the Landfill received 56,114 tons of MSW and 182,112 tons of ash and residue from H-POWER (for a combined total of 238,226 tons). According to Department of Environmental Services' data, the landfill diversion rate for 2020 was 82.2%.

22. In Calendar Year 2021, approximately 1,215,467 tons of waste was generated on O'ahu. Of that amount, the Landfill received 106,723 tons of MSW and 157,531 tons of ash and residue from H-POWER (for a combined total of 264,254 tons). According to Department of Environmental Services' data, the landfill diversion rate for 2021 was 80.0%.

23. Based upon data already collected, the Department of Environmental Services projects that for Calendar Year 2022, the Landfill will receive approximately 70,000 tons of waste and 160,000 tons of ash and residue from H-POWER (for a combined estimated total of 230,000 tons). Based upon current estimates, the MSW landfill diversion rate for 2022 is projected to be approximately 83%.

24. For all waste tonnage data provided in paragraphs 20 through 23 of this declaration (i.e., for Calendar Years 2010, 2020, 2021, and 2022), the amounts do not include the construction and demolition ("C&D") waste received and/or recycled by the private PVT landfill.

25. In 2012, H-POWER's capacity increased to 900,000 tons per year because of the addition of a third boiler. The third boiler is a mass burn unit, which can process waste streams that previously required landfilling, including sewage sludge, bulky waste, and treated medical waste (except medical sharps).

26. In total, H-POWER's original refuse derived fuel boilers and mass burn unit processes waste to reduce its volume by 90 percent, and as of 2021, approximately 750,000 tons per year of MSW and sludge are diverted from the WGSL.

27. Improvements at the H-POWER facility has resulted in an increased amount of metal recovered for recycling. Currently, H-POWER recovers about 25,000 tons of metal annually for recycling.

28. "Process residue" is composed of fine (small particle size) materials in the waste stream such as glass, sand and dirt that are separated using trommel screens and removed during pre-combustion waste processing.



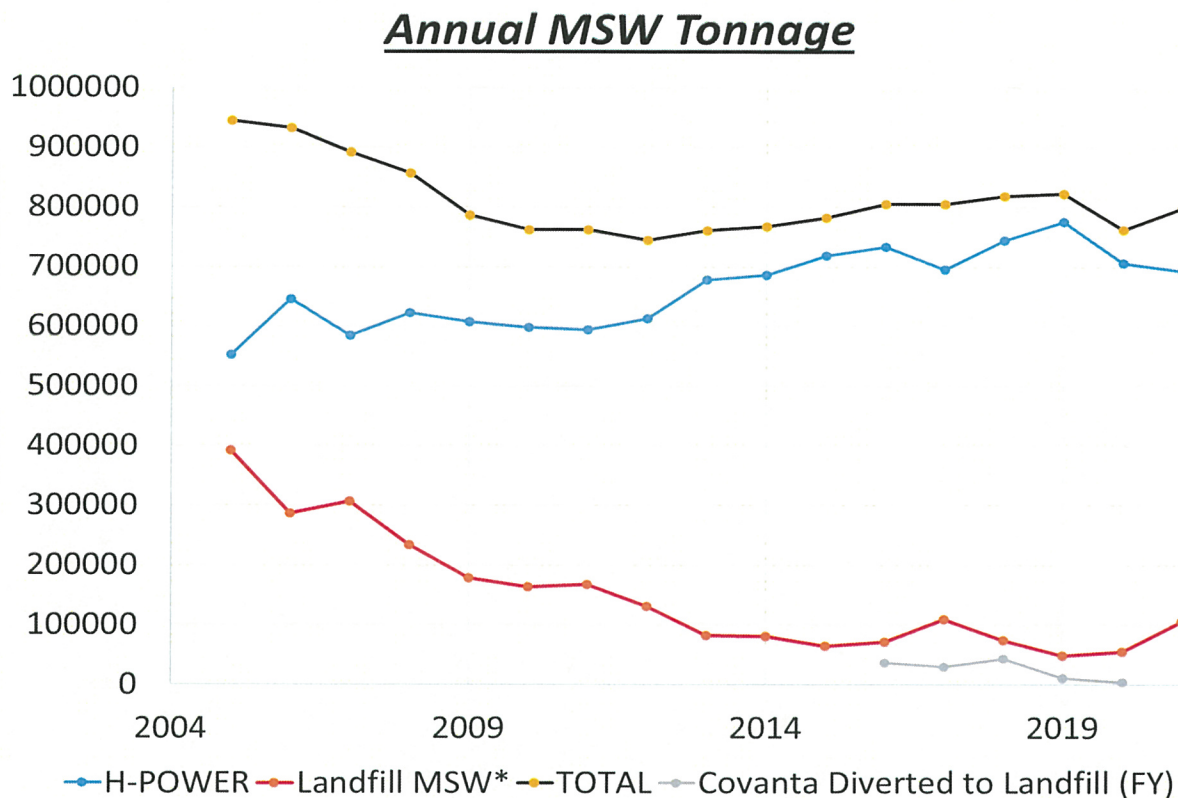
29. In July 2021, H-POWER began combusting its process residue on a trial basis. Operating data is being collected to determine whether to make the change permanent. This change has reduced the amount of process residue being disposed at the landfill from about 4,000 tons per month to zero (i.e., 48,000 tons per year).

30. The Department of Environmental Services is pursuing ash recycling to further decrease waste that must be landfilled. The Department of Environmental Services executed a contract for the processing and beneficial reuse of ash, and the first phase of the project is currently proceeding. The ash recycling project, once permitted and built, has the potential to divert at least 60% of the H-POWER ash that is currently landfilled at the WGS�. Based on 2021's reported tonnage, this approximates to at least 94,500 tons of ash per year that can eventually be diverted from the WGS�.

31. Currently, approximately 30,000 tons per year of auto shredder residue ("ASR") is disposed at the WGS�. Although the Department of Environmental Services had envisioned ASR to be diverted to H-POWER, test data showed that the high fluorine and chlorine content of the material could be extremely harmful to the boiler. This matter is pending further evaluation and possible testing. The ash recycling project may consider ASR processing as a potential future option.

32. The following graph (Figure 5) illustrates the reduction of MSW delivered to the WGS� over the years, generally because of source reduction and diverting more waste from the Landfill (red line) to H-POWER (blue line). The total MSW (black line) reflects the MSW reduction during the Great Recession that began in 2008, a slow but steady economic recovery, and another MSW reduction during the COVID-19 pandemic

that began in 2019. Slightly higher landfill tonnages in 2017 and 2021 were due to facility refurbishment projects and major turbine-generator maintenance.



**Figure 5**

33. As the decreasing MSW tonnage to the WGSL over time shows, the Department of Environmental Services has continued its effort to significantly reduce solid waste disposal at the WGSL by expanding H-POWER and the waste to materials recycling programs, and developing alternative disposal options for materials presently being landfilled. Collectively, these actions have and will continue to divert significant amounts of waste from the Landfill. However, despite new technological solutions that it continues to consider, the Department of Environmental Services cannot completely eliminate the need for a landfill at this time for reasons elaborated in its Application to Modify.



34. A landfill to dispose of MSW is required because there will always be material that cannot be combusted, recycled, reused or shipped.

35. A landfill is essential because H-POWER cannot operate without the landfill as a backup disposal option.

36. H-POWER is operating under Permit No. IN-0049-11 (see Exhibit “H”), and the Department of Environmental Services is waiting for the permit renewal.

37. A landfill is critical to the public health during natural disasters such as tsunamis or hurricanes and during times of emergency to control the rapid and massive accumulation of waste.

38. The PVT landfill stopped accepting asbestos containing material (“ACM”) on or about January 1, 2021, so the City and County of Honolulu’s (“City”) landfill started accepting ACM to provide an on-island disposal option. It has been reported that the PVT landfill will reach capacity in eight years, after which all of PVT’s waste must go to the City’s landfill. The Department of Environmental Services is gathering information to support legislation that would facilitate C&D recycling by enforcing minimum requirements, practices, and procedures for certain construction projects. The Department of Environmental Services is also working to apply for permit modifications for H-POWER to be able to accept wood and combustible C&D waste.

39. WGSL is permitted to receive ACM and other C&D waste.

40. The City’s landfill is and will be necessary for proper solid waste management, the lack of which would potentially create serious health and safety issues for the residents of O’ahu. A landfill is a necessary and critical component of the City’s overall Integrated Solid Waste Management Plan, which looks at all of the factors

that make up solid waste management, including reuse and recycling, the H-POWER facility, and landfilling for material that cannot be recycled or burned for energy.

41. Due to the new legal restrictions imposed by Act 73 (Session Laws of Hawaii 2020) and the Board of Water Supply's strong opposition to the siting of any of the six proposed landfill sites because all sites are located in the BWS' "No Pass Zone", the Department of Environmental Services is left with no viable new landfill site. The Department of Environmental Services will use the next two years to further evaluate and even create other options outside of the No Pass Zone. As recommended by the LAC, the Department of Environmental Services will: (1) seek a repeal of or amendment to Act 73; (2) continue discussions with the U.S. military regarding the acquisition of a site outside the No Pass Zone; and (3) evaluate the feasibility of acquiring (by eminent domain) residential properties adjacent to potential landfill sites to create sites that would comply with the one-half mile buffer from residential areas restriction in Act 73. The Department of Environmental Services will also continue to explore all other legally compliant options to identify a new site.

42. The Department of Environmental Services will try to amend Act 73 in the upcoming 2023 and/or 2024 legislative sessions.

43. The number of potential sites that may become available depends on the degree of success in amending Act 73 (e.g., reduction of the one-half mile buffer zone only; reduction of the one-half mile buffer zone and removal of the conservation district restriction; outright repeal of Act 73 or exemption). Most of these potential sites were previously identified in the Department of Environmental Services' 2012 and 2017 studies, but there may also be new sites. The Department of Environmental Services



would then be able to further evaluate and ultimately identify one of those potential sites as the alternative, by December 31, 2024.

44. The Department of Environmental Services is also working to identify all potential federal sites, and it will continue discussions with the U.S. military regarding acquiring a site that is outside of the No Pass Zone.

45. The Department of Environmental Services will evaluate sites outside the No Pass Zone that may have been eligible, but for a small number of residential properties that would place nearby sites within the restricted Act 73 one-half mile buffer zone. The Department of Environmental Services will also evaluate the feasibility of the eminent domain process to acquire these residential properties, and thereby remove the Act 73 impediment.

46. Given the high stakes at issue and the BWS' dire warnings, the Department of Environmental Services feels a two-year extension to accomplish the time consuming efforts described in the Application to Modify is in the best interest of the entire community. The Department of Environmental Services' goal is to identify a site outside of the No Pass Zone that complies with all laws and regulations.

47. Should the Planning Commission or LUC refuse the Department of Environmental Services' request for a two-year extension of time to identify a new landfill site, the Department of Environmental Services will be left with no choice but to identify and pursue the development of one of the six proposed sites located in the BWS No Pass Zone, despite the LAC's and the BWS' concerns regarding protecting O'ahu's sole drinking water source.

I DECLARE UNDER PENALTY OF LAW THAT THE FOREGOING IS TRUE  
AND CORRECT.

DATED: Honolulu, Hawai'i, DEC 22 2022.

  
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ROGER W. BABCOCK JR., Ph.D. P.E.