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DEPT OF PLANNING  
AND PERMITTING  
CITY & COUNTY OF HONOLULU

Attorneys for Applicant  
DEPARTMENT OF ENVIRONMENTAL  
SERVICES, CITY AND COUNTY OF  
HONOLULU

BEFORE THE PLANNING COMMISSION  
OF THE CITY AND COUNTY OF HONOLULU

STATE OF HAWAII

In the Matter of the Application of

DEPARTMENT OF ENVIRONMENTAL  
SERVICES, CITY AND COUNTY OF  
HONOLULU

For a New Special Use Permit To Supersede  
Existing Special Use Permit To Allow A  
92.5-Acre Expansion And Time Extension For  
Waimanalo Gulch Sanitary Landfill,  
Waimanalo Gulch, O'ahu, Hawai'i, Tax Map  
Key No. (1) 9-2-03: 72 And 73,

In the Matter of the Application of

DEPARTMENT OF ENVIRONMENTAL  
SERVICES, CITY AND COUNTY OF  
HONOLULU

To delete Condition No. 14 of Special Use  
Permit No. 2008/SUP-2 (also referred to as

FILE NO. 2008/SUP-2

DEPARTMENT OF ENVIRONMENTAL  
SERVICES, CITY AND COUNTY OF  
HONOLULU'S PROPOSED FINDINGS  
OF FACT, CONCLUSIONS OF LAW,  
AND DECISION AND ORDER;  
CERTIFICATE OF SERVICE

Land Use Commission Docket No. SP09-403)  
which states as follows:

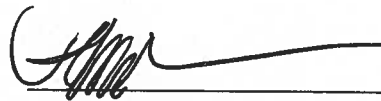
“14. Municipal solid waste shall be allowed at the WGSL up to July 21, 2012, provided that only ash and residue from H-POWER shall be allowed at the WGSL after July 31, 2012.”

**DEPARTMENT OF ENVIRONMENTAL SERVICES,  
CITY AND COUNTY OF HONOLULU'S PROPOSED  
FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION AND ORDER**

COMES NOW Applicant DEPARTMENT OF ENVIRONMENTAL SERVICES, CITY AND COUNTY OF HONOLULU, by and through its attorney, KAMILLA C. K. CHAN, Deputy Corporation Counsel, and respectfully submits this Proposed Findings of Fact, Conclusions of Law, and Decision and Order, pursuant to the Rules of the Planning Commission, City and County of Honolulu Section 2-74.

DATED: Honolulu, Hawaii, January 27, 2017.

Respectfully submitted,



KAMILLA C. K. CHAN  
Deputy Corporation Counsel

Attorney for Applicant  
DEPARTMENT OF ENVIRONMENTAL  
SERVICES, CITY AND COUNTY OF  
HONOLULU

BEFORE THE PLANNING COMMISSION  
OF THE CITY AND COUNTY OF HONOLULU

STATE OF HAWAII

In the Matter of the Application of

DEPARTMENT OF ENVIRONMENTAL  
SERVICES, CITY AND COUNTY OF  
HONOLULU

For a New Special Use Permit To Supersede  
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92.5-Acre Expansion And Time Extension For  
Waimanalo Gulch Sanitary Landfill,  
Waimanalo Gulch, O'ahu, Hawai'i, Tax Map  
Key No. (1) 9-2-03: 72 And 73,

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DEPARTMENT OF ENVIRONMENTAL  
SERVICES, CITY AND COUNTY OF  
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To delete Condition No. 14 of Special Use  
Permit No. 2008/SUP-2 (also referred to as  
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which states as follows:

“14. Municipal solid waste shall be allowed at  
the WGS� up to July 21, 2012, provided that  
only ash and residue from H-POWER shall be  
allowed at the WGS� after July 31, 2012.”

FILE NO. 2008/SUP-2

DEPARTMENT OF ENVIRONMENTAL  
SERVICES, CITY AND COUNTY OF  
HONOLULU'S PROPOSED FINDINGS  
OF FACT, CONCLUSIONS OF LAW,  
AND DECISION AND ORDER

**FINDINGS OF FACT,  
CONCLUSIONS OF LAW, AND DECISION AND ORDER**

This matter is a consolidation of two contested case hearings before the Planning Commission, City and County of Honolulu (the “Planning Commission”). The first proceeding involves the Department of Environmental Services, City and County of Honolulu’s (“Applicant” or “ENV”) application for a new special use permit (“SUP”), the expansion of the

Waimanalo Gulch Sanitary Landfill (“WGSL” or the “landfill”) and the withdrawal of County Special Use Permit No. 86/SUP-5. The second proceeding involves ENV’s application to modify County Special Use Permit No. 2008/SUP-2 for the sole purpose of deleting the July 31, 2012 deadline for the landfill to accept municipal solid waste (“MSW”).

Based on the record in this consolidated matter, including the evidence adduced at the contested case hearings, the credibility of the witnesses testifying at the hearings, and the respective proposed findings of fact, conclusions of law, and decisions and orders submitted by the parties and their respective responses thereto, the Planning Commission hereby makes the following findings of fact, conclusions of law, and decision and order:

### **FINDINGS OF FACT**

#### **I. PROCEDURAL MATTERS**

1. The WGSL is located at 92-460 Farrington Highway, Honouliuli, Ewa, Oahu. See Planning Division Master Application Form included within the Special Use Permit Application filed on December 3, 2008.

#### **A. RELEVANT HISTORY**

2. On March 13, 2003, the Planning Commission granted ENV’s application to expand the landfill by 21 acres (“2003 Planning Commission Decision”). See 2011 Contested Case Hearing Exhibit (“2011 Exhibit”) “A7.” At that time, ENV anticipated that the landfill, with the expanded 21 acres, would reach capacity in five years, so the Planning Commission recommended that ENV submit an alternative landfill site, or sites, to the City Council by December 31, 2003, and close the WGSL no later than May 1, 2008. Id. at 4-5.

3. On June 9, 2003, the Land Use Commission, State of Hawaii (“LUC”) issued a decision (“2003 LUC Decision”). See 2011 Exhibit “A8.” The 2003 LUC Decision also

required the City Council to select a new site for a landfill, with the assistance of the Blue Ribbon Site Selection Committee, by June 1, 2004. Id. at 7.

4. The City Council received an extension of the June 1, 2004 deadline from the LUC, and on December 1, 2004, selected the further expansion of the Waimanalo Gulch site as the City and County of Honolulu's future landfill site. The City Council determined that the Waimanalo Gulch site would satisfy Oahu's need for a landfill to manage its solid waste for the foreseeable future. The City Council concluded that (1) the Waimanalo Gulch site had at least 15 years of capacity left, (2) the Waimanalo Gulch site was the most economical site for which all costs and revenues are known factors, (3) other sites would have required large amounts of money to acquire land and develop the site and infrastructure, (4) an operating contract was already in existence, and (5) the landfill operator was committed to addressing community concerns. Resolution No. 04-348, CD1, FD1 (December 1, 2004). See 2011 Exhibit "A11."

5. To implement the City Council's decision to expand the WGS�, ENV needed to complete a Final Environmental Impact Statement ("FEIS"). The FEIS would address expansion of the WGS� by approximately 92.5 acres – to the full acreage of the WGS� at approximately 200 acres – and was a necessary step before ENV sought a new SUP for the entire site. See 2011 Exhibit "A1" at p. 2-29. See also 2011 Exhibit "A15."

6. To have time to prepare the FEIS, ENV requested an extension of the deadline for accepting waste at the existing landfill. See 2011 Exhibit "A14." On January 16, 2008, the Planning Commission granted ENV's application to amend the 2003 Planning Commission Decision by extending the deadline to accept waste at the WGS� from May 1, 2008 to May 1, 2010, or until the WGS� reached its permitted capacity, whichever occurred first ("2008 Planning Commission Decision"). See 2011 Exhibit "A15."

7. The LUC adopted the recommendation contained in the 2008 Planning Commission Decision, but shortened the waste acceptance deadline from May 1, 2010 to November 1, 2009, and required ENV to report to the LUC every six months on the actions taken to mitigate further use of the WGSL. See 2011 Exhibit "A16" at 18.

8. On October 13, 2008, a *Final Environmental Impact Statement, Waimanalo Gulch Sanitary Landfill Lateral Expansion, Waimanalo Gulch, Oahu, Hawaii*, *TMKs: (1) 9-2-003:072 and 073*, dated October 2008 ("2008 FEIS"), for the expansion of WGSL, was accepted on behalf of the Mayor by the Department of Planning and Permitting ("DPP"). See 2009 DPP Recommendation at 6; Exhibit "7" to the Department of Environmental Services, City and County of Honolulu's July 6, 2009 Memorandum in Opposition to Intervenor's Motion to Dismiss the Application.

9. On October 23, 2008, the Office of Environmental Quality Control of the State of Hawaii published notice of the 2008 FEIS Acceptance in *The Environmental Notice*, in accordance with the Hawaii Environmental Policy Act, Hawaii Revised Statutes ("HRS") Chapter 343. See 2009 DPP Recommendation at 6.

**B. 2008 APPLICATION**

10. On December 3, 2008, ENV filed a State Special Use Permit Application, with DPP pursuant to HRS Section 205-6, and Rules of the Planning Commission, City and County of Honolulu ("RPC"), subchapter 4, Rules Applicable to State Special Use Permits ("2008 Application"). See 2008 Application. The 2008 Application, designated as Special Use Permit Application File No. 2008/SUP-2, is for a new SUP for the use of the approximately 200.622-acre property, identified by Tax Map Key ("TMK") Nos. (1) 9-2-003: 072 and 073, in

Waimanalo Gulch, Oahu, Hawaii (the "Property"). See 2008 Application at Planning Division Master Application Form at 1-2.

11. In the 2008 Application, the ENV concurrently sought to withdraw its existing SUP for approximately 107.5 acres, Special Use Permit File No. 86/SUP-5, and the conditions imposed therein, if the 2008 application for the new SUP was granted. See April 2, 2009 memorandum from Applicant to DPP; Transcript ("Tr.") 07/02/09, 20:4-10; 2009 DPP Recommendation at 3, 24.

12. The Applicant also filed a petition with the LUC for a district boundary amendment to reclassify the Property from the State Agricultural District to the Urban District, which may be withdrawn if the 2008 Application was granted. See 2008 Application at 2-2, fn.1.

13. The State of Hawaii, Department of Land and Natural Resources, State Historic Preservation Division ("SHPD") reviewed the 2008 Application to expand the WGSL and Applicant's proposed mitigation and determined that there was no effect to historic properties, as stated in a letter from Nancy McMahon, Deputy State Historic Preservation Officer of SHPD to David Tanoue, Director of DPP, dated April 2, 2009. See Tr. 04/11/12, 103:18-25, 104:1-10; 2011 Exhibit "A48."

14. No Native Hawaiian customary and traditional rights or practices at the Property were identified. See 2011 Exhibit "A18" at 18.

15. The Planning Commission's public hearing to consider ENV's application was scheduled for May 6, 2009. On April 3, 2009, a notice of the hearing of the matter was published in the *Honolulu Star-Bulletin*.

16. On April 16, 2009, Ko Olina Community Association, Colleen Hanabusa, and Maile Shimabukuro (collectively, "Intervenors") filed a Petition to Intervene in the 2008 Application proceeding. On April 24, 2009, Applicant filed a Memorandum in Opposition to Intervenors' Petition to Intervene.

17. On May 1, 2009, DPP transmitted its report and recommendation for approval of the 2008 Application to the Planning Commission. See 2009 DPP Recommendation.

18. On May 1, 2009, the Planning Commission conducted a site visit to the Property and to the HPOWER facility.

19. At the public hearing on May 6, 2009, at the City Council Committee Meeting Room, Second Floor, 530 South King Street, Honolulu, Hawaii, the Planning Commission heard public testimony. The Planning Commission was also scheduled to hear argument regarding Intervenor's Petition to Intervene. At Intervenor's request, however, the Planning Commission continued the public hearing and consideration of Intervenors' Petition to Intervene to May 20, 2009.

20. On May 7, 2009, Todd K. Apo ("Apo") filed a Petition to Intervene in the 2008 Application proceeding. On May 18, 2009, Applicant filed a Memorandum in Opposition to Apo's Petition to Intervene.

21. On May 19, 2009, Intervenors filed a motion to recuse Commissioner John Kaopua.

22. On May 20, 2009, the public hearing was continued at the City Council Committee Meeting Room, Second Floor, 530 South King Street, Honolulu, Hawaii. At the continued public hearing, the Planning Commission heard and granted Intervenors' Petition to Intervene. Pursuant to RPC Subchapter 5, the matter was noted as a contested case. The



Planning Commission also began hearing argument regarding Apo's Petition to Intervene and continued that matter to June 10, 2009.

23. On June 5, 2009, Applicant filed a Memorandum in Opposition to Intervenors' Motion to Recuse Commissioner Kaopua.

24. On June 10, 2009, the hearing was continued at the City Council Committee Hearing Room, Second Floor, 530 South King Street, Honolulu, Hawaii. The Planning Commission heard and granted Intervenors' Motion to Recuse Commissioner Kaopua. The Planning Commission denied Apo's Petition to Intervene on the grounds that it was untimely filed, that Apo's position regarding the 2008 Application was substantially the same as the position of the Intervenors, and that the proceeding would be inefficient and unmanageable if Apo were allowed to intervene. See Findings of Fact, Conclusions of Law, and Order issued on July 27, 2009. Thereafter, the Planning Commission closed the public hearing on the 2008 Application.

25. On June 15, 2009, Intervenors filed their List of Witnesses, consisting of forty-two (42) potential witnesses including Apo. Applicant also filed its List of Witnesses, consisting of six (6) potential witnesses.

26. On June 22, 2009, the contested case hearing began on the 2008 Application at Kapolei Hale, 1000 Uluohia Street, Kapolei, Hawaii. The Applicant submitted Exhibits "A1" through "A31," which were accepted into the record by the Planning Commission. See Tr. 06/22/09, 29:2-13. The Applicant presented its first two witnesses: Brian Takeda, who was qualified as an expert in the field of urban and regional planning, and Hari Sharma ("Sharma"), who was qualified as an expert in the field of geotechnical and geo-environmental engineering. Id. at 33:5-8, 234:7-12. Sharma prepared a report entitled, "Engineering Report for Landfill

Expansion; Waimanalo Gulch Sanitary Landfill,” dated March 12, 2008, which is Exhibit “A29.” See Tr. 06/22/09, 235:4-25. Intervenors offered, and the Planning Commission received into the record, Exhibits “B1” and “B4.” Id. at 81:6-11, 226:14-15.

27. On June 24, 2009, the Planning Commission resumed the contested case hearing on the 2008 Application at the City Council Committee Meeting Room, Second Floor, 530 South King Street, Honolulu, Hawaii. The examination of Sharma was completed. The Applicant presented its third witness Joseph R. Whelan (“Whelan”).

28. On June 29, 2009, Intervenors filed a Motion to Dismiss the 2008 Application, contending that the 2008 FEIS did not cover the entire 200.622-acre site and, therefore, Applicant’s 2008 Application had to be dismissed.

29. On July 1, 2009, the Planning Commission resumed the contested case hearing on the 2008 Application at Kapolei Hale, 1000 Uluohia Street, Kapolei, Hawaii. The examination of Whelan was completed. The Applicant presented its fourth and fifth witnesses: Richard Von Pein, who was qualified as an expert in the field of landfill design and geotechnical engineering, and Frank Doyle, who at the time was the Chief of the Division of Refuse, City and County of Honolulu. See Tr. 07/01/09, 93:2-8, 176:4-9. Applicant offered, and the Planning Commission accepted for the record, Exhibit “A32.” Id. at 168:16-17.

30. On July 2, 2009, the Planning Commission resumed the contested case hearing on the 2008 Application at the City Council Chambers, Third Floor, 530 South King Street, Honolulu, Hawaii. The Applicant offered no further witnesses and concluded its case-in-chief. See Tr. 07/02/09, 4:15-17. Intervenors began their case-in-chief and presented the following witnesses: Abbey Mayer, Josiah Hoohuli, William J. Aila, Jr., Daniel Banchiu, Cynthia Rezentes, Maeda Timson, and Apo. The Applicant offered, and the Planning Commission

received into the record, Exhibits "A33" and "A34." Id. at 32:20-25, 240:7-13. Intervenor offered, and the Planning Commission received into the record, Exhibit "B5." Id. at 185:21-23. Other documents were referenced by the Planning Commission and the parties as Exhibits "B2" and "B3." Intervenor rested their case. Id. at 279:15. Intervenor did not testify and did not submit any written testimony during the 2009 contested case hearing.

31. On July 6, 2009, the ENV filed a Memorandum in Opposition to Intervenor's Motion to Dismiss the Application.

32. On July 8, 2009, the Planning Commission resumed the contested case hearing on the Application at the City Council Committee Meeting Room, Second Floor, 530 South King Street, Honolulu, Hawaii. Applicant presented David M. Shideler as a rebuttal witness, who was qualified as an expert in archaeology and historical cultural resources. See Tr. 07/08/09, 11:15-21. Petitioner offered and the Planning Commission received into the record, Exhibits "A35," "A36," and "A37." Id. at 8:25-9:5, 65:14-22, 68:6-13. Intervenor made their witness, Apo, available for additional questions by Commissioner Beadie Dawson. The examination of Apo was completed.

33. On July 8, 2009, the Planning Commission also heard and denied Intervenor's Motion to Dismiss the 2008 Application on the grounds that the Planning Commission does not have jurisdiction to consider the sufficiency of the 2008 FEIS and that Intervenor Hanabusa had previously filed the appropriate matter contesting the sufficiency in State circuit court. The Planning Commission scheduled decision-making for the 2008 Application on July 31, 2009, at the City Council Committee Meeting Room, Second Floor, 530 South King Street, Honolulu, Hawaii. Id. at 110:15-25, 111:1-5, 111:20-21.

34. On July 17, 2009, Applicant filed the Department of Environmental Services, City and County of Honolulu's Post-Hearing Brief and Certificate of Service, and the Department of Environmental Services, City and County of Honolulu's Proposed Findings of Fact, Conclusions of Law, and Decision and Order, and Certificate of Service.

35. On July 17, 2009, Intervenors filed the Post-Hearing Brief of Intervenors, Certificate of Service and Intervenors' Ko Olina Community Association, Colleen Hanabusa and Maile Shimabukuro Proposed Findings of Fact and Conclusions of Law and Decision and Order, and Certificate of Service.

36. On July 29, 2009, Applicant filed the Department of Environmental Services, City and County of Honolulu's (1) Response to Post-Hearing Brief of Intervenors and (2) Exceptions to Intervenors' Proposed Findings of Fact, Conclusions of Law, and Decision and Order, Declaration of Gary Y. Takeuchi, Exhibits "1" – "3", and Certificate of Service.

37. On July 29, 2009, Intervenors filed its Reply Brief of Intervenors and Certificate of Service.

38. On July 31, 2009, the Planning Commission recommended approval of ENV's application subject to ten conditions and set forth this approval in its Findings of Fact, Conclusions of Law, and Decision and Order, dated August 4, 2009 ("2009 Planning Commission Decision"). See 2011 Exhibit "A17." The Planning Commission issued its 2009 Planning Commission Decision after careful consideration of all the evidence presented at the contested case hearing, the credibility of witnesses testifying at the hearing, the proposed findings of fact, conclusions of law, and decisions and orders submitted by the parties and their respective responses thereto, and the written arguments of the parties. 2011 Exhibit "A18" at 1.

39. In its 2009 Planning Commission Decision, the Planning Commission found:

- It would take more than seven years to identify and develop a new landfill site (other than WGSL).
- On December 1, 2004, the City Council adopted Resolution No. 04-349, CD1, FD1, which selected the Property [200.62-acre property, identified by Tax Map Key Nos. (1) 9-2-003: 072 and 073, in Waimanalo Gulch, Oahu, Hawaii] as the site for the City's landfill.
- The proposed expansion of the landfill within the Property was needed because WGSL is a critical part of the City's overall integrated solid waste management efforts.
- Continued availability of WGSL is required as a permit condition to operate HPOWER, for cleanup in the event of a natural disaster, and because there is material that cannot be combusted, recycled, reused, or shipped.
- Therefore, a landfill is currently necessary for proper solid waste management, the lack of which would potentially create serious health and safety issues for the residents of Oahu.
- WGSL is the only permitted public MSW facility on the island of Oahu and the only permitted repository for the ash produced by HPOWER.
- WGSL is a critical portion of the City's overall Integrated Solid Waste Management Plan ('ISWMP'), which looks at all of the factors that make up solid waste management, including reuse and recycling, the HPOWER facility, and landfilling for material that cannot be recycled or burned for energy.
- Other items that cannot be recycled or burned at HPOWER are deposited at WGSL, such as screenings and sludge from sewage treatment plants, animal carcasses, tank bottom sludge, contaminated food waste that cannot be recycled, and contaminated soil that is below certain toxicity levels.

See id. at 8, 18-19.

40. The 2009 Planning Commission determined that "[t]he term or the length of the new SUP shall be until the Waimanalo Gulch landfill reaches its capacity as compared to a definite time period of 'X' number of years." 2011 Exhibit "A17" at 2.

41. Commissioner Komatsubara noted that ENV had "demonstrated that we [people of the City and County of Honolulu] need a landfill . . . we need a landfill on this island for us to move forward . . . it would not be in the community's best interest if we were to close this

landfill before we find another landfill.” Id. at 3. Commissioner Komatsubara further explained as follows:

In my opinion, simply putting on a new closure date to this new SUP will not lead to the closure of the Waimanalo Gulch Sanitary Landfill. I believe that the focus should not be on picking a date. The focus should be on how do we get the City to select a new site because you’re not going to close this landfill until you find another site. I don’t think it’s in the interest of our community not to have a landfill.

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So what this proposal does is, it says look, [Applicant] can keep [WGSL] open until your [*sic*] full, until you’ve reached the capacity, but you have an obligation starting from next year [2010] to start looking for a new site. Now whether you take it seriously or not, that’s up to you because we have the power to call you in, and you have the obligation now to report every year on what you’re doing to find a new landfill site whether it be a replacement site or supplemental site or both. We have the right to hold a hearing at any time we feel that you are not...the applicant is not in good faith moving forward with reasonable diligence to find a new site.

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...I think going down the old path of just putting a [closure] date in there has not worked. We put it down three or four times before and every time we came to that date, it was extended further and further...I’d rather not say it’s a certain date only to know that when we reach that date we’re going to extend it further until we find the new site. I’d rather focus on an effort to find a new site and have [Applicant] come in every year and explain to us where you are in your effort to find a new site. That’s what this [order] does.

Id. at 4.

42. Consistent with Commissioner Komatsubara’s comments, the Planning Commission imposed several conditions to monitor the City’s progress toward finding a new landfill site. Certain of those conditions, which the City has never contested, are:

- On or before November 1, 2010, begin to identify and develop one or more new landfill sites that shall either replace or supplement the WGSL.
- Continue efforts to use alternative technologies to provide a comprehensive waste stream management program that includes HPOWER, plasma arc, plasma gasification and recycling technologies, as

- appropriate, and shall continue efforts to seek beneficial reuse of stabilized, dewatered sewage sludge.
- Provide annual reports to the Planning Commission regarding the status of identifying and developing new landfill sites on Oahu, the WGSL's operations, and Applicant's compliance with conditions imposed herein.
  - Notify the Planning Commission of termination of the use of the Property as a landfill.

See 2011 Exhibit "A18" at 25-26.

43. The Planning Commission also approved withdrawal of Special Use Permit File No. 86/SUP-5 upon 2008/SUP-2 taking effect and that all conditions placed on the property under Special Use Permit File No. 86/SUP-5 shall be null and void. Id. at 27.

44. The LUC considered the Planning Commission's Findings of Fact, Conclusions of Law, and Decision and Order, the oral arguments of the parties and record and files in the matter relating to the 2008 Application. On October 22, 2009, the LUC issued its written Order Adopting the City and County of Honolulu Planning Commission's Findings of Fact, Conclusions of Law, and Decision and Order as its own Findings of Fact, Conclusions of Law, and Decision and Order, subject to an additional six conditions ("2009 LUC Decision"). See 2011 Exhibit "A19." Disregarding the Planning Commission's reasoned analysis and the underlying facts, the 2009 LUC Decision granted ENV's Application subject to the added condition that is now at issue:

14. Municipal solid waste shall be allowed at the WGSL up to July 31, 2012, provided that only ash and residue from HPOWER shall be allowed at the WGSL after July 31, 2012.

Id. at 4, 8.

45. ENV timely appealed the LUC-imposed July 31, 2012 deadline for the landfill to accept MSW.

C. **2011 APPLICATION**

46. On June 28, 2011, Applicant filed an Application to Modify the Special Use Permit No. 2008/SUP-2 by Modifying the Land Use Commission's Order Adopting the City and County of Honolulu Planning Commission's Findings of Fact, Conclusions of Law, and Decision and Order with Modifications dated October 22, 2009 ("2011 Application"), with DPP pursuant to RPC Sections 2-18 and 2-49, and the Rules of the State of Hawaii, Land Use Commission, Section 15-15-70. See 2011 Application. The 2011 Application specifically seeks the deletion of Condition No. 14. Id. ENV sought to amend SUP Permit No. 2008/SUP-2 because there was no assurance that the Supreme Court would render a decision on the appeal prior to the July 2012 deadline and it needed to ensure the continued operation of the landfill.

47. On September 4, 2011, a notice of the Planning Commission's public hearing to consider ENV's 2011 Application set for October 5, 2011, was published in the *Honolulu Star-Bulletin*.

48. On September 9, 2011, DPP transmitted its report to the Planning Commission, recommending approval of the 2011 Application. See 2011 DPP Recommendation.

49. On September 16, 2011, Ko Olina Community Association and Maile Shimabukuro (collectively, "Intervenor KOCA") filed a Motion to Recognize Ko Olina Community Association and Maile Shimabukuro as parties. On September 23, 2011, Applicant filed a Memorandum in Opposition to Intervenor's Motion to Recognize Ko Olina Community Association and Maile Shimabukuro as Parties. On September 30, 2011, Intervenor filed a Reply Memorandum to Applicant's Memorandum in Opposition to Intervenor's Motion to Recognize Ko Olina Community Association and Maile Shimabukuro as parties.



50. On September 16, 2011, Schnitzer Steel Hawaii Corp. (“Intervenor Schnitzer”) filed a Petition to Intervene.

51. At the public hearing on October 5, 2011, at the Mission Memorial Auditorium, 550 South King Street, Honolulu, Hawaii, the Planning Commission heard public testimony. The Planning Commission heard and granted Intervenor Schnitzer’s Petition to Intervene. The Planning Commission heard and denied Intervenor KOCA’s Motion to Recognize Ko Olina Community Association and Maile Shimabukuro as Parties but granted Intervenor KOCA’s Motion to Intervene as joint intervenors. See Tr. 10/5/11, 35:5–23, 42:9–43:3. Thereafter, the Planning Commission closed the public hearing on the application.

52. On October 26, 2011, Applicant filed its List of Witnesses, consisting of five potential witnesses. Intervenor KOCA filed its List of Witnesses, consisting of 31 potential witnesses. Intervenor Schnitzer filed its List of Witnesses, consisting of one potential witness.

53. On November 7, 2011, Intervenor KOCA filed a Motion to Dismiss.

54. On November 9, 2011, the Planning Commission filed its Order Regarding Prehearing Conference.

55. On November 14, 2011, Applicant filed its Memorandum in Opposition to Intervenor KOCA’s Motion to Dismiss. Intervenor Schnitzer also filed its Memorandum in Opposition to Intervenor KOCA’s Motion to Dismiss.

56. On November 29, 2011, the parties filed their Stipulation to Amend Briefing Schedule as Provided in the Planning Commission of the City and County of Honolulu’s Order Regarding Prehearing Conference Dated November 9, 2011.

57. On December 7, 2011, the Planning Commission conducted a hearing at the Mission Memorial Hearings Room, Mission Memorial Building, 550 South King Street,

Honolulu, Hawaii, on Intervenor KOCA's Motion to Dismiss. The Planning Commission heard and denied Intervenor KOCA's Motion to Dismiss. Thereafter, the Planning Commission commenced the contested case hearing on the 2011 Application and the parties presented their opening statements. On December 13, 2011, the parties filed written direct testimony.

58. On January 11, 2012, the Planning Commission resumed the contested case hearing on the Application at the Mission Memorial Hearings Room, Mission Memorial Building, 550 South King Street, Honolulu, Hawaii. The Applicant began its case-in-chief and presented its first witness: Timothy Steinberger, Director of the Department of Environmental Services. See Tr. 01/11/12, 11:10-11. Intervenor KOCA offered, and the Planning Commission received into the record, Exhibits "K1" to "K162." Id. at 15:12-14; 17:22-23; 96:2-13. Intervenor Schnitzer moved to admit the court reporter's transcript of the October 5, 2011 public hearing so as to allow the public testimony to be made a part of the record. Id. at 15:18-22. The Planning Commission granted Intervenor Schnitzer's request. Id. at 15:23.

59. On January 25, 2012, the Planning Commission resumed the contested case hearing on the Application at the Mission Memorial Hearings Room, Mission Memorial Building, 550 South King Street, Honolulu, Hawaii. Applicant offered, and the Planning Commission received into the record, Exhibits "A1 to A33." Tr. 1/25/12, 6:13-20. The Applicant presented its second and final witness in its case-in-chief, Steven Y.K. Chang, Branch Chief, State of Hawaii, Department of Health, Solid and Hazardous Waste Branch. Id. at 6:21. Applicant offered no further witnesses and concluded its case-in-chief, but reserved the right to call rebuttal witnesses. Intervenor Schnitzer presented its first and only witness, Larry Snodgrass, and concluded its case-in-chief. Id. at 72:4-5, 86:20. Intervenor KOCA offered, and the Planning Commission received into the record, Exhibit "K163." Id. at 6:10-12. Intervenor

KOCA offered, and the Planning Commission received into the record, Exhibits “K164” through “K169.” Id. at 38:14-19, 61:8-13; 55:11-15; 85:22–86:3.

60. On February 8, 2012, the Planning Commission resumed the contested case hearing on the 2011 Application at the Mission Memorial Hearings Room, Mission Memorial Building, 550 South King Street, Honolulu, Hawaii. Intervenor KOCA began its case-in-chief and presented the following four witnesses: Ken Williams; Beverly Munson; Cynthia Rezendes; and Paul Duke Hospodar. Tr. 02/08/12, 14:4-5, 56:13-14, 72:18-19, 82:15-16. ENV offered, and the Planning Commission received into the record, Exhibits “A34” and “A35.” Id. at 29:25-30:2, 56:6-8.

61. On March 7, 2012, the Planning Commission resumed the contested case hearing on the 2011 Application at the Mission Memorial Hearings Room, Mission Memorial Building, 550 South King Street, Honolulu, Hawaii. Intervenor KOCA presented its fifth and sixth witnesses: Shad Kane and Dwight Miller. The Planning Commission accepted Mr. Miller as an expert in solid waste management. Tr. 03/07/12, 5:20-21, 17:22-23, 19:19-25. Intervenor KOCA offered, and the Planning Commission received into the record, Exhibits “K170,” “K171,” “K173” to “K176,” “K178” and “K179.” Id. at 122:19-23; 152:20–153:4, 153:13, 155:4-5.

62. On April 4, 2012, the Planning Commission resumed the contested case hearing on the 2011 Application at the Mission Memorial Hearings Room, Mission Memorial Building, 550 South King Street, Honolulu, Hawaii. The parties agreed to take the remaining witnesses out of order due to scheduling difficulties. Intervenor Schnitzer first presented Tom Zelenka as a rebuttal witness. Tr. 04/04/12, 7:19-20. Applicant then presented Janice Marsters as its first rebuttal witness. Id. at 30:4-5. Applicant offered, and the Planning Commission received into

the record, Exhibit "A36." Id. at 33:4-16. Intervenor KOCA presented its seventh and eighth witnesses: Maile Shimabukuro and Maeda Timson. Intervenor KOCA then rested its case. Id. at 123:18-19, 133:5-6. Applicant presented its second rebuttal witness, Gary Gill, Deputy Director, State of Hawaii, Department of Health, Environmental Management Division. Id. at 143:17. Intervenor KOCA offered, and the Planning Commission received into the record, Exhibits "K191," "K194," "K208," "K215," "K217," "K218," "K222," "K223," "K226," and "K227"." Id. at 15:8-22, 18:24-19:3, 19:5-18, 24:4-16, 83:14-19, 101:15-19, 122:20-24, 143:4-10, 168:22-169:11.

63. On April 11, 2012, the Planning Commission resumed the contested case hearing on the Application at the Mission Memorial Hearings Room, Mission Memorial Building, 550 South King Street, Honolulu, Hawaii. Applicant presented its third and fourth rebuttal witnesses: Hari Sharma, who was qualified as an expert in landfill design and permitting, and Timothy Steinberger. See Tr. 04/11/12, 6:14-15, 69:4-5. Applicant offered, and the Planning Commission received into the record, Exhibits "A37" to "A50." Id. at 13:1-9, 15:21-25, 16:1, 25:1-7, 36:10-37:20, 43:25-44:2, 105:11-15, and 138:1-5. Intervenor KOCA offered, and the Planning Commission received into the record, Exhibits "K189," "K190," "K193," "K195," "K196," "K198," "K230," "K247," and "K251." Id. at 188:25-189:5. Applicant rested its case. Id. at 212:17-22.

64. On April 23, 2012, the Planning Commission resumed the contested case hearing on the Application at the Mission Memorial Hearings Room, Mission Memorial Building, 550 South King Street, Honolulu, Hawaii. Intervenor KOCA presented two rebuttal witnesses: Dwight Miller and Eddie Belluomini. Intervenor KOCA then rested its case. See Tr. 04/23/12, 7:7-11, 36:6-10, 48:24. Intervenor KOCA offered, and the Planning Commission received into

the record, Exhibits “K255,” “K257,” “K192,” “K220,” “K256,” and “K258.” *Id.* at 12:13-17, 15:16-21, 47:18-25, 48:1-23. The parties presented their closing arguments.

65. The Planning Commission scheduled decision-making for the 2011 Application on May 25, 2012, at the Mission Memorial Hearings Room, Mission Memorial Building, 550 South King Street, Honolulu, Hawaii. On April 24, 2012, Intervenor KOCA filed its Eighth Amended Exhibit List.

66. On April 27, 2012, Intervenor KOCA filed an *Ex Parte* Motion to Reopen the Contested Case Hearing to Admit Limited Additional Documentary Evidence After the Hearing Closed (“Motion to Reopen the Contested Case Hearing”). Intervenor KOCA sought to admit Exhibits “K259” and “K260” into the record.

67. On May 1, 2012, Applicant filed a Memorandum in Opposition to Intervenor KOCA’s Motion to Reopen the Contested Case Hearing.

68. On May 2, 2012, ENV, Intervenor Schnitzer and KOCA filed their respective proposed findings of fact, conclusions, of law, and decisions and orders (“proposed findings”).

69. On May 14, 2012, ENV filed a response, and Intervenor Schnitzer filed exceptions to Intervenor KOCA’s proposed findings. Intervenor KOCA also filed responses to ENV’s and Schnitzer’s proposed findings.

70. ENV offered, and the Planning Commission received into the record of the 2011 Application proceeding, Exhibits “A1” to “A42,” without objection, “A43” to “A46,” over objection of the Intervenor, and “A47” to “A50,” without objection.

71. Intervenor Schnitzer offered, and the Planning Commission received into the record, Exhibits “S1” to “S4.” Intervenor Schnitzer also requested to admit the court reporter’s transcript of the October 5, 2011 public hearing so that the public testimony would be made a

part of the record. See Tr. 01/11/12, 15:18-22. The Planning Commission granted Intervenor Schnitzer's request. Id. at 15:23.

72. Intervenor KOCA offered, and the Planning Commission received into the record, Exhibits "K1" to "K169," over objection, "K170," "K171," "K173" to "K176," "K178," "K179," "K189" to "K196," "K198," "K208," "K215," "K217," "K218," "K220," "K222," "K223," "K226," "K227," "K230," "K247," "K251," "K255" to "K258," without objection.

**D. HAWAII SUPREME COURT DECISION AND LUC REMAND OF THE 2008 APPLICATION TO THE PLANNING COMMISSION FOR CONSOLIDATION WITH THE 2011 APPLICATION**

73. On May 4, 2012, the Hawaii Supreme Court ruled in favor of ENV and struck Condition No. 14. The Supreme Court ruled that the MSW deadline imposed by the LUC is inconsistent with the evidence in the record and not supported by substantial evidence. The Supreme Court also determined that because Condition No. 14 appeared to be material to the LUC's approval of the SUP, the approval could not stand without further consideration. Accordingly, the Supreme Court remanded the matter to the LUC for further hearings as the LUC deems appropriate to determine whether the LUC would have reached the same conclusion without the imposition of Condition No. 14. Dep't of Env'tl. Servs. v. Land Use Comm'n, 127 Haw. 5, 17-19 (2012).

74. By Order adopted October 8, 2012, the LUC remanded the 2008 Application to the Planning Commission for the expressed purpose of consolidating it with the proceeding on the 2011 Application, so that the Planning Commission may issue and transmit a single, consolidated Findings of Fact, Conclusions of Law, and Decision and Order on the Matter to the LUC. See Order Remanding County Special Use Permit File No. 2008/SUP-2 to the City and County of Honolulu Planning Commission, dated October 8, 2012.

**E. CONSOLIDATION OF PROCEEDINGS AND OTHER PROCEDURAL MATTERS**

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75. On January 15, 2013, Intervenor KOCA filed a Motion to Effect the Consolidation of the Separate Proceedings in 2008 SUP-2 as Ordered by the State Land Use Commission on October 8, 2012.

76. On January 23, 2013, ENV filed its Memorandum in Opposition to Intervenor Ko Olina Community Association and Maile Shimabukuro's Motion to Effect the Consolidation of the Separate Proceedings in 2008 SUP-2 as Ordered by the State Land Use Commission.

77. On February 19, 2013, the Planning Commission approved the stipulation and order to continue the hearing on the LUC's October 8, 2012, Order Remanding County Special Use Permit File No. 2008/SUP-2 to the City and County of Honolulu Planning Commission and Intervenor Ko Olina Community Association and Maile Shimabukuro's Motion to Effect the Consolidation of the Separate Proceedings in 2008 SUP-2, as Ordered by the State Land Use Commission on October 8, 2012. A hearing on the two above-described matters was scheduled for February 20, 2013, but continued to April 17, 2013. See Stipulation and Order to Continue the February 20, 2013 Hearing to April 17, 2013.

78. No further action was taken by the Planning Commission until August 17, 2016. On that date, the Planning Commission convened a hearing at the Mission Memorial Hearings Room, Mission Memorial Building, 550 South King Street, Honolulu, Hawaii, and considered Intervenor Ko Olina Community Association and Maile Shimabukuro's Motion to Effect the Consolidation of the Separate Proceedings in 2008/SUP-2, as Ordered by the State Land Use Commission on October 8, 2012, and the Department of Environmental Services, City and County of Honolulu's Motion to Stay Proceedings to April 22, 2017. The Planning Commission ordered the consolidation of County Special Use Permit File No. 2008/SUP-2 and the

proceedings on ENV's 2011 Application so that it may issue and transmit a single, consolidated Findings of Fact, Conclusions of Law, and Decision and Order to the LUC, and denied the City's Motion to Stay.

79. On September 30, 2016, ENV filed a Motion to Reopen the Contested Case Hearing for the Limited Purpose of Taking Official Notice of Facts. ENV sought to have the Planning Commission take official notice of the Sixth Annual Report of the Status of Actions Taken to Comply With the State Land Use Commission's Order Dated October 2, 2009 and Status of Operations of the Waimanalo Gulch Sanitary Landfill, which was submitted to the Planning Commission in compliance with Condition No. 6 of the 2009 LUC Order.

80. On October 5, 2016, ENV filed a Motion for Extension of Time to April 21, 2017, so that the parties may have adequate time to discuss a proposed deadline for the acceptance of MSW and draft a joint proposed findings of fact, conclusions of law, and decision and order. On October 6, 2016, Intervenor Schnitzer joined in the Motion for Extension of Time. On the same date, Intervenor KOCA joined in the request, subject to certain clarifications.

81. On October 12, 2016, the Planning Commission heard ENV's Motion for Extension of Time, Intervenor KOCA's Motion to Reopen the Contested Case Hearing, and ENV's Motion to Reopen the Contested Case Hearing. During the hearing, ENV amended its request for an extension of time by requesting a shorter 90-day extension, which was granted. The Planning Commission denied the motions to reopen the contested case hearing.

## **II. PROPOSAL FOR SPECIAL USE PERMIT**

82. In this consolidated proceeding, ENV seeks a SUP for the expansion and continued use of the approximately 200.622-acre property identified by TMK Nos. (1) 9-2-003: 072 and 073, in Waimanalo Gulch, Oahu, Hawaii, as a landfill. See 2008 Application at 1-1. At



the time the 2008 Application was filed, a 107.5-acre portion of the Property was used as a landfill, and ENV proposed to expand the landfill by the remaining 92.5 acres. Of the approximately 92.5 acres in the expansion area, approximately 37 acres was to be utilized for landfill cells. See 2008 Application at 1-2. In addition, the expansion area included the development of landfill-associated support infrastructure, including drainage, access roadways, a landfill gas collection and monitoring system, leachate collection and monitoring systems, stockpile sites, a public drop-off center, and a landfill gas-to-energy system and other related features. Id.; see also 2008 Application at Part I.

**A. DESCRIPTION OF THE PROPERTY**

83. The Property is owned by the City and County of Honolulu and operated by Waste Management of Hawaii, Inc. (“WMH”). See Tr. 07/01/09, 179:4-8.

84. The state land use district designation for the Property is Agricultural District. See 2009 DPP Recommendation at 1; Application at Planning Division Master Application Form; 2011 DPP Recommendation at 1.

85. The existing City zoning district for the Property is AG-2, General Agricultural District. See 2008 Application at Part I; 2009 DPP Recommendation at 1; 2011 DPP Recommendation at 1.

86. The Ewa Development Plan recognizes the existing landfill. See 2009 Contested Case Hearing Exhibit (“2009 Exhibit”) “A5”; 2009 DPP Recommendation at 1; 2011 DPP Recommendation at 1.

87. Existing uses of the property are landfill and open space. See 2009 DPP Recommendation at 2; 2011 DPP Recommendation at 1.

88. Elevations at the Property range from a low of 70 feet above mean sea level (msl) to 940 feet (msl) in the northern portion. Except for areas of fill, the steep-sloped valley contains dryland grasses and an abundance of rock outcrops. See 2009 DPP Recommendation at 8.

89. The area is fairly dry. According to an on-site rain gauge located at the weather station, the average rainfall at WGS� is approximately 15 inches per year. See 2008 Application at 2-28; 2009 DPP Recommendation at 9.

90. The soil found at the Property consists primarily of Rock Land (rRK) with small amounts of Stony Steep Land (rSY). See 2008 Application at 2-30.

91. According to the Agricultural Lands of Importance to the State of Hawaii (“ALISH”) system, the Property is not classified as one of three types of agricultural land: Prime Agricultural Land, Unique Agricultural Land and Other Important Agricultural Lands. See Figure 8-2 of 2009 Exhibit “A1.”

92. The University of Hawaii Land Study Bureau overall master productivity rating for the Property is “E,” which indicates very poor crop productivity potential. See 2008 Application at 2-31.

93. The Federal Emergency Management Agency, Flood Insurance Rate Map, identifies the landfill property as within “Zone D,” an area in which flood hazards are undetermined, but possible. See Figure 5-9 of 2009 Exhibit “A1.”

94. The Property is not located within the Special Management Area. See Figure 8-3 of 2009 Exhibit “A1.”

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**B. SURROUNDING USES**

95. Surrounding uses to the Property include the Hawaiian Electric Company Kahe Power Plant to the west, single-family dwellings and the Ko Olina Resort to the south, and vacant lands to the north and east. See Figure 7-3 of 2009 Exhibit "A1."

96. Farrington Highway is located south of the Property. Id.

97. The region east of the Property comprises the Makaiwa Hills development, which is slated for development. See Tr. 06/22/09, 64:6-8; Figure 7-3 of 2009 Exhibit "A1." WGSL has been in operation since 1989. See Tr. 07/01/09, 179:9-10. Subsequently, in 2008, the Makaiwa Hills parcel was rezoned for single family, mixed and apartment use by Ordinance 8-26, Bill 47 (2008). See 2009 Exhibit "A36."

98. The Makaiwa Hills developer's intention, according to its Final EIS dated October 2007 (the "Makaiwa Hills EIS"), is to proceed with development from makai (south) proceeding in a mauka (north) direction, as well as proceeding from east to west. See Tr. 06/22/09, 167:6-25. The Makaiwa Hills EIS indicates that construction of the western portion of its development closest to WGSL will not proceed until 2015. Id. at 167:25-168:3; 2009 Exhibit "A37" at p.4-60.

99. WGSL plans to initiate closure of the existing landfill cells in the area nearest Makaiwa Hills' proposed residences prior to 2015. See Tr. 06/22/09, 168:1-8; 188:17-25, 189:1-14. In particular, cell E2 and portions of cells E1, E3, and several other MSW cells (labeled Closure Sequence "A" in Exhibit "A12") are anticipated to be covered, capped and closed by 2012. See 2009 Exhibit "A12"; Tr. 06/24/09, 91:7-92:1.

100. There is a ridgeline between Makaiwa Hills and WGSL. See Tr. 06/22/09, 191:12-18. The elevation of the landfill will be much lower than Makaiwa Hills. Id. at 170:2-4.

The area of Makaiwa Hills nearest to WGSL's landfill cells in the proposed expansion area is identified as open space on the Makaiwa Hills property and will not be developed. Id. at 191:4-8; 2009 Exhibit "A11."

101. The current landfill access road proceeds up to the scalehouse, past the ash cells, veers due west to the west side of the Property, and travels up the western side of the Property and into the proposed expansion area. See Tr. 06/24/09, 89:5-16. This course takes the road away from the eastern boundary of the Property and away from Makaiwa Hills. Id.

102. WMH documents and responds to complaints received about the operations of WGSL. Id. at 100:9-101:3. WMH received six complaints in 2007, three in 2008, and three in 2009. Id. at 101:4-7.

103. Daniel Banchiu, general manager of JW Marriott, Ihilani ("Marriott") as of 2009, testified for Intervenors at the July 2, 2009 hearing on the 2008 Application. See Tr. 07/02/09, 99:16-25. As of 2009, the Marriott operated a hotel at the Ko Olina resort. Id. at 99:4-8. He testified that he is aware of view and odor complaints from his guests, but that as of 2009, the Marriott has not notified WMH about any complaints. Id. at 100:14-101:12; 110:2-10. He further testified that guests complained of views of a smokestack in the distance. On cross-examination, however, he admitted that he has never been to the landfill and that the smokestack could be located at some other facility – perhaps a facility with a smokestack. Id. at 106:1-107:12. WGSL does not have a smokestack but the Kahe Power Plant, which is adjacent to the Property, does. See 2009 Exhibit "A1" at p. 5-93.

**C. STABILITY, CONTROLLED BLASTING AND BERMS**

104. Pursuant to federal and state regulations governing landfills, a seismic hazard evaluation was performed to determine seismic slope stability of the landfill. See Tr. 06/22/09 at

238:21–239:5. Consistent with accepted industry practice, the project was analyzed for a design earthquake of magnitude 7.0, with an acceleration of 0.25 G, which is a quarter of gravity force. Id. at 240:1-9.

105. Under the Resource Conservation and Recovery Act, Subtitle D, Seismic Design Guidance document, the acceptable displacement of landfills due to a seismic event is twelve inches. Id. at 248:25–249:13. The seismic deformation analysis of the design for the expanded landfill showed that seismic deformations were six inches or less, meeting the seismic stability criteria. Id. at 249:14-23.

106. The use of controlled blasting at the Property, which is very common in many landfill excavations, will not affect the stability of WGSL because the imparted energy of controlled blasting is so small and significantly less than 0.1 G. Id. at 240:12-23; 250:3-16; 253:3-7. Monitoring probes installed by the Hawaiian Electric Company near the western Property boundary to measure vibrations from controlled blasting efforts at the landfill as permitted prior to the 2008 Application did not detect any measurable readings. Id. at 252:1-15.

107. In order to alleviate community concerns about controlled blasting, a blast test program will be implemented at the Property, wherein distance, velocity and frequencies transmitted by controlled blasting will be monitored. Id. at 251:7-16; 252:16–253:2. If the controlled blasting affects the landfill or any of the structures nearby, adjustments will be made. Id. at 251:7-16. There are no concerns regarding stability during the blast test program itself. Id. at 251:17-19.

108. A slope stability study was also prepared for the proposed project. Id. at 244:2-4, 250:15-17. The proposed design meets the required factors of safety of 1.3 and 1.5 for short-term and long-term conditions, respectively. Id. at 245:18–246:11.

109. The impact of accumulated leachate on stability was also studied. According to Dr. Sharma and Richard Von Pein, even under extreme circumstances of leachate accumulation, using worst case scenarios that have never been experienced, the landfill would remain stable. See Tr. 06/24/09, 61:2-24; Tr. 07/01/09, 170:16–171:1-15.

110. Whenever new cells are designed, a seismic deformation analysis and slope stability analysis must be performed to determine how the design impacts the existing cells. See Tr. 06/24/09, 9:19-23.

111. Berms are included in the design for several reasons, including for diversion of the surface water to make sure leachate is contained within the landfill and to create airspace while ensuring stability. See Tr. 06/22/09, 236:18–237:2; Tr. 06/24/09, 24:13-20; Tr. 07/01/09, 100:12-15.

112. A small Ash Toe Berm was part of the original design for WGSL. See Tr. 07/01/09, 142:12-15; 142:21–143:3. The Ash Toe Berm was expanded in 2005 to address a small area where the factor of safety was less than 1.5. Id. at 142:17-20.

113. The E1 and West Berms were a part of the 2002 design for the 14.9-acre landfill expansion. Id. at 168:19–170:1; 2009 Exhibit “A32.”

114. The West Berm will be extended further into the canyon under the proposed design for the expansion. See Tr. 06/22/09, 237:3-23; Tr. 06/24/09, 36:25–38:11.

#### **D. STORM WATER AND LEACHATE**

115. Leachate is rain water that falls on open landfill cells. Tr. 07/01/09, 14:11. The bottom of the individual landfill cells is contoured to direct leachate to a low point (“sump”) and has a multi-layered composite liner system. See id. at 15:4-13; 101:2-25; 102:1-4; 2009 Exhibit “A1” at Figure 4-3. Within the sump is a permanent riser that contains a pump, which then

pumps the leachate in a hard pipe up to the surface, where it is then pumped into a tank for disposal at a wastewater treatment facility. See Tr. 07/01/09, 15:4-13, 17:12-15. The wastewater treatment facility accepts the leachate for treatment after determining it meets the requirements of the wastewater treatment facility's own permits and would not violate the Clean Water Act. Id. at 18:6-15; Tr. 06/22/09, 144:7-19, 147:2-5. Each of the leachate sumps is equipped with an automated pump that activates at a preset level below the compliance level. Tr. 07/01/09 105:9-12. There is an alarm that lets WMH know if the pump is no longer functioning. Id. at 105:13-16. In addition, WMH physically monitors the sumps. Id. at 105:13-20.

116. Drainage for the Property is intended to capture storm water and divert it around the landfill if it originates off site (surface run-on) or into the existing sedimentation basin if it originates onsite (surface run-off). Id. at 13:16-25; Tr. 06/22/09, 119:17-25. The sedimentation basin is designed to allow storm water to settle so that dissolved solids that come off of the landfill can settle out in that basin. See Tr. 07/01/09, 77:21-24. The water is eventually discharged to the ocean subject to Department of Health, State of Hawaii ("DOH") permitting requirements under the national pollution discharge elimination system. Id. at 77:25-78:6. A third-party company takes samples to ensure compliance with certain discharge limits. Id. at 78:7-79:5. In addition, DOH inspects WMH's ditches and slopes. Id. at 78:13-15.

117. Leachate does not come into contact with storm water. Id. at 76:21-23. The storm water and surface water system is completely separate from the leachate collection system. Id. at 76:25-77:8; 97:15-98:8.

118. Groundwater in the area of the Property is monitored for leachate contamination. Id. at 98:12-17.

**E. GAS COLLECTION AND CONTROL SYSTEM AND EPA NOTICE OF VIOLATION**

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119. On April 4, 2006, the EPA issued a Notice of Violation (“NOV”) to WGS�, which included the late installation of a landfill gas collection and control system (the “GCCS”) and alleged violations of reporting requirements. See Tr. 07/01/09, 19:3-8; Appendix B of 2009 Exhibit “A1.” Both issues were resolved by August 2005. Tr. 07/01/09, 19:8. As of 2009, there were 40 gas wells at the Property. Id. at 22:18-25.

120. The GCCS collects landfill gases that are formed from the decomposition of the waste material. The gas is then burned off at the onsite flare pursuant to a DOH-issued air quality permit. Id. at 23:6-11.

121. In installing the GCCS, elevated temperatures above the EPA’s standard operating temperature of 131° Fahrenheit were discovered at WGS�. Id. at 112:7-10, 113:25–114:2. WMH has submitted a demonstration to the EPA establishing that WGS� can be safely operated at higher than the standard operating temperatures. Id. at 112:11-15.

122. As of 2009, the EPA NOV is pending resolution of two outstanding issues that evolved from the NOV: the temperature issue and a monetary settlement. Id. at 106:2-13.

123. The EPA has not issued any NOV specifically for the elevated temperatures at WGS�. See Tr. 07/01/09, 21:18–22:1. There is no evidence that there has ever been, or that there is currently, a landfill fire at WGS�. Id. at 108:8-14. If there was combustion at WGS�, WMH would implement its contingency plan, including turning off the gas wells in the area of the fire, thereby depriving the combustion area of needed oxygen, which is standard procedure for handling landfill oxidation events. Id. at 107:8-25; 108:1-7.



**F. TRAFFIC**

124. A traffic impact report (“TIR”) was prepared for the project. See Tr. 06/22/09, 51:6-17; Appendix I of 2009 Exhibit “A1.” The TIR analyzes the amount of existing traffic transiting Farrington Highway on both the eastbound and westbound approaches, as well as the volume of traffic entering and coming out of the Property. Id.

125. The TIR concluded that even with the expansion of the landfill, the volume of traffic would not be expected to increase dramatically. Traffic going in and out of the landfill is less than approximately one percent of the total volume of traffic in the region. See Tr. 06/22/09, 51:18-24.

**G. ARCHAEOLOGICAL AND CULTURAL RESOURCES**

126. An *Archaeological Inventory Survey, Waimanalo Gulch Landfill Expansion*, 2008 (“AIS”) and a *Cultural Impact Assessment (Draft), Waimanalo Gulch Landfill Expansion*, 2008 were prepared for the Property. See Appendices G and H of 2009 Exhibit “A1,” respectively.

127. One historic property, State Inventory of Historic Properties (“SIHP”) #50-80-12-6903, was identified by the study. See AIS (Appendix G of Exhibit “A1”) at 45. SIHP #50-80-12-6903, is of pre-contact origin, and consists of three large upright boulders potentially utilized as trail or boundary markers. Id.

128. Applicant proposes to address SIHP # 50-80-12-6903 within a mitigation/preservation plan to be reviewed and accepted by the SHPD. See Tr. 06/22/09, 49:21–50:5; 2009 Exhibit “A3.” Specifically, Applicant has proposed to temporarily relocate the upright stones to Battery Arizona, and return the upright stones as close as possible to their current locations after the landfill has been closed. See Tr. 06/22/09, 49:5-20; 2009 Exhibit “A3.”

129. SHPD has reviewed Applicant's proposed mitigation and determined that there is no effect to historic properties, as stated in a letter from Nancy McMahon, Deputy State Historic Preservation Officer of SHPD to David Tanoue, Director of DPP, dated April 2, 2009. See Tr. 06/22/09, 49:20–51:1; 2009 Exhibit "A4."

130. No native Hawaiian customary and traditional rights or practices at the Property were identified. See CIA (Appendix "H" of 2009 Exhibit "A1") at 79.

#### **H. LANDFILL SITING**

131. Condition No. 1 of the 2009 Planning Commission Decision (Condition No. 4 of the 2009 LUC Decision) requires the City, on or before November 1, 2010, to **begin** to identify and develop one or more new landfill sites that shall either replace or supplement the WGS. See 2011 Exhibit "A18" at 25; 2011 Exhibit "A19" at 6. As part of preparing the updated Integrated Solid Waste Management Plan ("ISWMP"), the City allotted funds in the Fiscal Year 2010 budget to conduct a site selection study for a secondary landfill on Oahu in satisfaction of Condition No. 1. Thus, the Mayor's Landfill Site Selection Committee ("Site Selection Committee") was formed. See Written Direct Testimony of Timothy E. Steinberger dated December 13, 2011 ("Steinberger Written Testimony") at 11; Tr. 01/11/12, 54:24–55:6.

132. The Mayor chose 12 members to serve on the Landfill Advisory Committee based upon numerous criteria including technical expertise and experience, community involvement, and availability to serve. The members were: David Arakawa, Thomas Arizumi, John Goody, Joe Lapilio, Tesha H. Malama, Janice Marsters, Richard Poirier, Chuck Prentiss, and George West (Bruce Anderson, David Cooper, and John DeSoto were originally appointed but have stepped down). Steinberger Written Testimony at 11-12.

133. The Mayor tasked the Site Selection Committee to provide the City with advisory recommendations concerning the selection of a future site for a landfill to replace or supplement WGS� by accepting MSW, ash and residue from facilities such as HPOWER, and construction and demolition debris waste (C&D) for the Island of Oahu. Id. at 12; Tr. 04/04/12, 35:1-8.

134. The Committee would not select one site, but would rank numerous sites according to criteria that it determines most appropriate for landfill sites to accommodate all three waste streams (MSW, ash and residue, and C&D debris). Steinberger Written Testimony at 12.

135. ENV contracted with R.M. Towill Corporation (“RMTC”) in June 2011 to assist the Committee with this process, specifically to research and provide the information required or requested by the Committee members. Id.

136. The Landfill Advisory Committee met on January 20, February 10, March 10 and 31, May 12, July 19, 2011, March 16, 2012, and April 20, 2012. See 2011 Exhibits “A31,” “A47,” and “K258.”

137. Over the course of multiple meetings, the Committee discussed numerous criteria for a new landfill, including, but not limited to the following:

- Location relative to identified disamenities
- Location relative to HPOWER
- Effect of precipitation on landfill operations
- Landfill development operation and closure costs
- Displacement costs
- Precipitation
- Ground water contamination
- Design issues
- Access issues
- Proximity to other land uses (residences, institutions, etc.)
- Traffic impacts on residential neighborhoods
- Infrastructure availability
- “Those criteria impacting people that live here 365 days a year”
- Feasibility and cost issues

- Infrastructure, engineering and sustainability issues
- Wind direction issues related to closeness to other activities
- Impact on agricultural lands

Steinberger Written Testimony at 12-13, see also 2012 Exhibit “A31.”

138. The Committee began by working with potential landfill sites identified by the City in previous studies. However, at the sixth meeting, the Committee requested that RMTC research and provide information on and analyses of additional sites to ensure a thorough vetting of appropriate sites on Oahu. Specifically, they tasked RMTC to research and include for consideration sites that are above or cross the no-pass or underground injection control (“UIC”) line. The City previously did not consider these sites because of its policy not to site landfills above the no-pass or UIC line to protect the island’s drinking water sources. The Committee also asked RMTC to review the Board of Water Supply capture zone maps and identify if there were any 100-acre or larger parcels that could be included on the list of potential landfill sites, even if the sites were above the no-pass or UIC line. Steinberger Written Testimony at 13-14, see also Tr. 04/04/12, 40:1–41:14.

139. The Committee also developed exclusionary criteria or factors for sites above the no-pass or UIC line based on the following information:

- State Land Use Districts (Conservation, Agricultural, and Urban); there are no Rural Districts on Oahu;
- Groundwater Resources (Board of Water Supply and Others);
- Land Ownership (Federal, State, City, and Private);
- U.S. Fish & Wildlife Services (USFWS) Critical Habitats;
- State Natural Area Reserve System (NARS);
- Impaired Water Bodies (per Department of Health and U. S. Environmental Protection Agency);
- Agricultural Land Ratings (Land Study Bureau (LSB) and Agricultural Lands of Importance to the State of Hawaii (ALISH));
- Commission on Water Resource Management (CWRM) Well Data; and
- Criteria protecting airports and airfields with a 10,000 linear foot buffer.

Steinberger Written Testimony at 14, see also Tr. 04/04/12, 42:1–45:23.

140. Upon applying the above exclusionary criteria, RMTC presented the Committee with two additional sites for consideration: (1) the Kahe Point Power Generating Station owned by Hawaiian Electric Company; and (2) the Makaiwa Hills subdivision owned by the James Campbell Trust Estate, which is part of a much larger parcel of land already under development. In addition, the second site was found to border the USFWS-designated critical habitat of the *Isodendron pyrifolium* (critically imperiled Hawaiian shrub). RMTC noted that both sites should be considered as “non-sites” due to either existing or pending land uses. Steinberger Written Testimony at 14.

141. After discussion of these results, the Committee asked RMTC to undertake another review of potential sites, including the following land areas:

- Parcels that are 90 acres or more, but less than 100 acres in size;
- Land that is owned by the State of Hawaii, including agricultural district land, conservation district land, and land that is within a critical habitat; and
- Land that is outside of well capture zones and well buffer zones, but within the no-pass or UIC line.

Id. at 14-15, see also 2011 Exhibit “A31.”

142. The Committee reasoned that it is important that RMTC conduct this additional review because the Committee sought to understand the availability of sites only slightly smaller than 100 acres. Certain Committee members also expressed that this further consideration will provide for more comprehensive review of potential sites. This additional request delayed final application of the criteria and its recommendations. Steinberger Written Testimony at 15.

143. At the time of the contested case hearing on the 2011 Application, the Committee’s meetings were still ongoing. Id.

144. The City’s effort to identify and develop one or more landfill sites has been performed with reasonable diligence.

145. Even after the City selects a new landfill site or sites, it will take ENV more than seven years to complete the tasks necessary to start operations at a new site(s). These tasks include, but are not limited to: (1) the preparation and processing of an EIS in full compliance with HRS Chapter 343 and related administrative rules for Oahu's next landfill site or sites (e.g., conducting site surveys or investigations, analyzing alternatives including alternative sites and technologies, obtaining public participation and comments); (2) the acquisition of landfill sites, which may require an appraisal of the land value, a determination by the City regarding the funding source for the acquisition, and approval for the expenditure of public funds by the Honolulu City Council; and (3) detailed engineering studies, construction and bid documents, and other approvals. Id. at 15-16.

146. The detailed engineering studies are needed to support the landfill design. These studies will include, but are not limited to: land surveys; geotechnical soils and structural investigations; hydrology and hydrogeological investigations. The completion of these studies is required so that the landfill construction drawings can incorporate civil design requirements, such as the provision of drainage, access roadways, and infrastructure, to support the use of the site. Coordination with governmental agencies, utilities, and adjoining landowners, consistent with mitigation measures identified in the EIS, will also be required to minimize disturbance to nearby property owners and utilities. The length of time required for the completion of detailed engineering studies, construction drawings and bid documents, and the processing of procurements for the design and construction contractors (which could include the selection of a qualified landfill operator), as well as the acquisition of building permits, land use approvals such as SUP or district boundary amendment, depending on where the site(s) is located, and

other necessary approvals, is estimated to be between one and three years. That is before the City even breaks ground on a new site. Id. at 16.

## **I. WASTE DIVERSION**

147. Condition No. 2 of the 2009 Planning Commission Order (Condition No. 5 of the LUC Order) requires ENV to continue its efforts to use alternative technologies to provide a comprehensive waste stream management program. See 2011 Exhibits “A18” at 25, and “A19” at 6.

148. In 2010, the last year for which waste totals were available during the contested case hearings in this matter, ENV diverted 34.4% of the total MSW from the landfill to H-POWER. See 2011 Exhibit “A27.” In 2010, the ENV also diverted 36.9% of the total MSW from the landfill through general material recycling. Id. As of May 2010, ENV accomplished island wide-expansion of its curb-side green waste recycling program to over 150,000 residences. See Steinberger Written Testimony at 19. The City has a program of community recycling bins to encourage schools to recycle cardboard, as well as plastic bottles and cans. Id. at 20–21.

149. In Calendar Year 2010, approximately 1,214,904 tons of waste was generated on Oahu. Of the 1,214,904 tons, the landfill received only 163,736 tons of MSW and 179,946 tons of ash and residue from HPOWER. The amount of MSW deposited at WGS� reflects a steady decrease from 2009. In FY09 the landfill received approximately 233,065 tons of MSW and in FY10 some 178,512 tons of MSW. In comparison, ash and residue has remained fairly constant. The 2010 disposal rate represents a total diversion of MSW from the landfill of 71.7%. See 2011 Exhibit “A27,” see also 2011 Exhibit “A29.”

150. As the decreasing MSW tonnage to WGS� shows, ENV is continuing its effort to significantly reduce solid waste disposal at the WGS� by expanding HPOWER, the waste to materials recycling programs, and developing alternative disposal options for materials presently being landfilled. Collectively, these actions have and will divert significant amounts of waste away from WGS�. In addition, new technology solutions continue to be evaluated. However, there still are no new technologies with proven reliability and performance that would completely eliminate the need for a landfill. Steinberger Written Testimony at 17.

151. The HPOWER facility began operations in 1990 and as of 2011, it successfully diverts approximately 600,000 tons per year of MSW from the WGS�. HPOWER reduces our dependence on fossil fuels. One ton of trash produces saleable energy the equivalent of one barrel of oil. Moreover, the facility converts more than 1,600 tons of waste per day into electricity sufficient to power more than 60,000 homes. As of December 2011, on an island-wide basis, HPOWER produced approximately 7% of Oahu's electricity. Id. at 18.

152. In addition, as of December 2011, almost 100% of the ferrous and non-ferrous metal in the MSW processed at HPOWER was recovered for recycling. At that time, approximately 18,000 tons of ferrous metals (e.g., tin cans) and 2,500 tons of non-ferrous metals (e.g., aluminum cans) are recycled annually. Id.

153. In December 2011, it was reported that the City would be adding a third boiler at HPOWER, which will increase the capacity of the facility to 900,000 tons per year. Id. at 18; Tr. 4/11/12, 84:22-24. The amount of waste diverted from the landfill and recycled to energy will increase substantially. The third boiler was scheduled to begin operations in January 2013. Steinberger Written Testimony at 18.



154. The continued operation of the HPOWER facility, however, is dependent upon continued operation of the WGS� for disposal of ash and residue. Also, DOH requires as a condition of HPOWER's permit that HPOWER have a disposal alternative – the landfill – as a contingency for routine maintenance, natural disasters, and emergencies. Id.

155. As of 2010, material recycling programs account for a 29.7% landfill diversion rate, which means that approximately 448,000 tons per year is diverted out of the total waste stream of 1.5 million tons per year. The City is continuing to increase the 29.7% diversion rate by expanding and improving programs. See 2011 Exhibit "A30," see also 2011 Exhibit "A28."

156. The City's bulky item collection service is designed to provide residents with once-a-month pickup service of old appliances, furniture, etc. Recyclable items such as white goods, Freon containing appliances, tires, and used auto batteries and propane tanks are segregated and delivered to the respective recycling facilities. The remainder of bulky item collection is disposed of at the landfill. Steinberger Written Testimony at 19.

157. Residents also may self-haul their bulky items to City disposal sites, including three transfer stations and six convenience centers. Recyclable materials are segregated in separate bins or storage areas for delivery to recycling facilities. Materials that cannot be recycled is hauled to the landfill. Id.

158. The anticipated HPOWER expansion is a mass burn boiler that will accept and convert much of the bulky waste such as furniture, mattresses and carpet that presently go to the landfill, to energy and recycled metals. See Tr. 1/11/12, 65:9–10, 66:8-17. As of December 2011, the mass burn boiler was expected to be in operation by January 2013. Steinberger Written Testimony at 18.

159. As of November 2011, the City provides Green Waste Recycling to approximately 100,000 residences as part of the island-wide automated curbside recycling program. At that time, Oahu's capture rate for green waste was 77% which indicates a high level of participation at a high recovery level, either 85% participation at 90% recovery level or vice versa. (Capture rates are measured by the proportional amount of recyclable material collected relative to the total amount available in the specific waste stream. Capture rates do not denote the participation rate.) It is unlikely that this capture rate can get any higher. The City believes that the automated collection has encouraged more participation, further diverting materials from the landfill. Residents may self-haul green waste to City convenience centers or directly to the composting facility. All of the green waste is delivered to a private vendor that is contracted by the City to produce mulch and other products from the waste. Id. at 19-20.

160. All but incidental food waste and green waste is diverted from the WGS. Tr. 04/11/12, 114:1-14.

161. From a sustainability standpoint, green waste is one of the few recyclable materials that is all reused here on this Island. Most other recyclable materials are shipped to the mainland or to Asia. Steinberger Written Testimony at 20.

162. Curbside Recycling for Residential Mixed Recyclables continues to increase with island wide expansion – 160,000 residences – as of May 2010. Id.

163. During fiscal year 2011, the curbside collection system recovered 18,000 tons of mixed recyclables and 53,000 tons of green waste for a total of 71,000 tons recycled. This contributes to a full 6% to the overall reduction of MSW going to the landfill. Id.

164. The City continues to promote condominium recycling through a program that reimburses condominium properties for costs associated with the start-up of a recycling program.

Id. at 21.

165. Most multi-family dwellings contract with private hauling companies to collect their refuse and would likewise need to establish their own recycling programs. Multi-family recycling is voluntary. Id.

166. Commercial recycling is taking place at commercial businesses through private recyclers. Id.

167. The City enacted ordinances that support this recycling effort:

- Cardboard. Commercial and government generators are partially banned from landfill disposal. Only 10% of a truckload can be composed of cardboard.
- Green waste. Commercial and government generators are partially banned from landfill disposal. Only 10% of a truckload can be composed of green waste.
- Tires, auto batteries, white goods and scrap metals. Banned from all disposal sites.
- Glass containers. Glass recycling is required for bars and restaurants.
- Paper Recycling. All office buildings of a certain size must conduct recycling of paper goods.
- Food Waste Recycling. All hotels, restaurants, grocery stores, food courts, food manufacturer processors and hospitals meeting a certain size are required to recycle food waste.
- City agencies are required to purchase recycled paper products and to recycle newspaper, cardboard, office paper, aluminum, glass, and plastics.

Id. at 21-22.

168. ENV coordinates numerous events year-round to educate the public about waste management and recycling. Public Education and Outreach Programs include (a) the City's [www.opala.org](http://www.opala.org) website, which provides comprehensive and up-to-date information about the City's refuse and recycling programs and services; and (b) tours of City facilities and recycling businesses, whereby the public has an opportunity to get an up-close look at waste processing

and recycling operations and go behind the scenes at businesses that have instituted model recycling programs. Id. at 22.

169. The residual solids and semi-solids separated during the treatment of wastewater at wastewater treatment plants (“WWTPs”) are commonly referred to as sewage sludge or bio-solids. These materials have been landfilled, but ENV has been working to divert much of this waste stream from WGSL. As of December 2011, the Synagro facility at the Sand Island WWTP digested, dewatered, and heat-dried approximately 20,000 tons per year of sewage sludge. The end product is a pellet that can be used as a fertilizer or soil amendment material. Furthermore, as of December 2011, ENV was working with the operator of HPOWER, Covanta, to be able to burn sewage sludge for energy as part of the third boiler that was expected to be operational by January 2013. Id. at 22-23.

170. ENV completed a report, “Alternative Technologies for the Treatment and Minimization of Sewage Sludge,” that identifies potential sludge processing technologies that could be implemented to provide waste mitigation or improve operational performance at the City’s WWTPs. See 2011 Exhibit “A33.” The report discusses a wide range of technologies for different stages in the sludge treatment process and thus technologies cannot be directly compared outside their specific treatment and processing function. Accordingly, the report is a list of appropriate technologies for further consideration as part of the ongoing island-wide solids planning effort; it is not a decision-making document that recommends a best solution.

Additional factors that will need to be considered as part of any evaluation and selection process include:

- An assessment of a particular alternative technology specific to the WWTP(s) with respect to the facilities already existing there.
- Capital and operation and maintenance costs specific to the WWTP(s) under consideration.

- Implementation timeline for planning, design, permitting, procurement, construction and startup.
- Compatibility of technology with overall Island-wide Solids Master Plan.
- New development and increased future capacity needs.
- Planned upgrades at the existing WWTPs (i.e., upgrade to secondary treatment)

Steinberger Written Testimony at 23-24.

171. The report points out that the technology and process selection for implementation at any of the WWTPs will need to be evaluated from an island-wide perspective due to the issues of combining/transporting solids between WWTPs as well as the identified end-user needs and beneficial use limitations. Other key elements that should be considered in evaluating these technologies and processes for the Island-wide Master Plan include eligibility and redundancy planning in the event that a WWTP treatment unit (i.e., centrifuge or digester) or solids outlet (i.e., landfill or composting facility) is temporarily out of service. Id. at 24.

172. Despite the City's successes in diverting sewage sludge from the landfill, it was reported in December 2011 that 15,000 to 20,000 tons per year of sewage sludge was still landfilled, and as of July 31, 2011, there was nowhere else to dispose of sewage sludge. Id.

#### **J. LANDFILL DESIGN AND OPERATIONS**

173. In landfill design and permit reports, the important elements that must be outlined are the boundaries for the waste, the height of the waste, and the containment system for the waste (i.e., the kind of landfill lining system). The designation in the design drawings of the different cells that will contain the waste are not distinctly outlined but are identified by geographical location, much like streets are identified. See Tr. 04/11/12, 18:1-19:21. Therefore, the numbering does not dictate the sequence of construction. The actual site conditions and location determine the sequence of construction. Id. at 23:7-24:19.

174. For effective design and permitting, the sequence of construction of the cells in the landfill is not outlined because the need for certain cells depends on variable factors like waste stream, how much waste is generated, and the type of waste received. Therefore, while the boundary, height and containment system are prescribed in landfill design and permitting documents, how the cell is built, the size of the cell, and the order of the construction of the cells are not constrained. On the contrary, if these latter aspects are prescribed, it may result in harm to human health and the environment because the landfill designer and operator would not have the flexibility to ensure the proper location for waste disposal. Id. at 18:5–19:21.

175. This flexibility in constructing the cells of a landfill is not unique to WGSL but is common practice in landfill design. Id. at 21:4-20.

176. The construction of cells E-5 and E-6 was not a digression from what was contained in the engineering report and FEIS because the size, sequence, and actual construction (whole or in parts) was not dictated by these reports. Id. at 25:3–26:24.

177. The size and sequence of construction of cells E-5 and E-6 did not increase the risk of public health hazards and did not contribute to the release of MSW that resulted from the December 2010 and January 2011 rain storms. On the contrary, the size and sequence of construction of cells E-5 and E-6 were more protective of public health because by building only a portion of the cell, the portion that is to be used, the liner is protected from long term exposure to the elements, rain and sun, and the integrity of the liner is maintained. Id.

178. In December 2010 and January 2011, WGSL was hit by a series of heavy rains that resulted in the flooding of areas within WGSL, including the active cell where MSW was being disposed. Steinberger Written Testimony at 26.

179. At that time, WMH was in the process of completing construction of the Western Surface Water Drainage System that was intended to divert stormwater around the landfill. The DOH Solid and Hazardous Waste Management permit for WGS� allowed the simultaneous construction and use of the cell and the Western Surface Water Drainage System. Id.

180. Because the heavy rains in December 2010 and January 2011 occurred before the Western Surface Drainage System was completed, the active cell that had been accepting waste at the WGS� was inundated with storm water, and the force and quantity of storm water breached the cell, causing a release of MSW, including treated medical waste, into the storm water and into the ocean. Id.

181. The City has been cooperating with Federal and State investigations concerning the release of MSW. WMH and the City worked with the U.S. Environmental Protection Agency (“EPA”) and the DOH in the aftermath of the storms, entering into an Administrative Order on Consent with EPA that outlined the remedial actions needed to address the MSW release and steps needed to reopen the landfill. The EPA issued a NOV on November 29, 2011, concerning the release of MSW into the storm water and into the ocean. EPA did not impose any penalties as part of the NOV and continues to monitor the WGS� operations closely. Id. at 26-27.

182. In September 2011, WMH notified the City, EPA, and DOH that it identified significant irregularities with landfill gas data that had purportedly been collected and recorded by its landfill gas technician at WGS�. Further investigation by WMH revealed that a rogue WMH employee had fabricated some wellhead gas parameter measurements instead of collecting the data through verifiable measurements. The employee failed to collect actual data from mid-2010 until August 2011. Id. at 27.

183. As a result of WMH's initial investigation, WMH hired an environmental consultant to perform a detailed assessment of (1) the current status of the wellfield and gas collection and control system to determine whether the fabricated data had concealed adverse changes in the wellfield, and (2) the past status of the wellfield based on verifiable data. Based upon the detailed assessment, WMH concluded that the wellfield and gas collection control system is performing within the expected range of monitored parameters at the facility and that there is no evidence that the wellfield has undergone any adverse changes in the last two years. Id.

184. Despite these events, the DOH, Solid and Hazardous Waste Branch, the branch that regulates the solid waste operations at WGS�, is not intending to take enforcement action relating to the operations at the WGS�. The DOH, Solid and Hazardous Waste Branch is satisfied with the operations at WGS�. See Tr. 01/25/12, 59:19–61:12. The DOH, Solid and Hazardous Waste Branch expressed concern about the imposition of the July 31, 2012 deadline for MSW at the point in time when there were not disposal options for certain types of waste which may potentially threaten human health or the environment. See id. at 12:15-19.

185. Despite pending enforcement and alleged EPA violations, in April 2012, Gary Gill, the Deputy Director of the DOH, Environmental Management Division, the individual heading the agency responsible for regulating WGS�, still insisted that Oahu needs a landfill, that WGS� is the only landfill for MSW and ash, and that shutting down the landfill before other options are available will endanger public health. See Tr. 04/04/12, 149:2–151:4.

### **III. PURPOSE AND NEED**

186. As of March 16, 2009, there was approximately 12 months of landfill airspace capacity remaining in the MSW portion of the current SUP area, and approximately 24 months



of landfill airspace capacity remaining in the ash portion of the current SUP area. See Tr. 06/24/09, 81:22–82:6; 83:1-14.

187. On December 1, 2004, the City Council adopted Resolution No. 04-349, CD1, FD1, which selected the Property as the site for the City’s landfill. See 2009 Exhibit “A20.” This decision was the result of a comprehensive public process and evaluation. See 2009 DPP Recommendation at 17.

188. The continued operation and proposed expansion of the landfill was needed because WGS� is a critical part of the City’s overall integrated solid waste management efforts. See Tr. 07/01/09, 181:4-8.

189. WGS� is the only permitted public MSW facility on the island of Oahu. Thus, the WGS� is the only landfill option for disposal of MSW for the general public and the only permitted repository for the ash produced by HPOWER. See Tr. 07/01/09, 181:20–183:4; Tr. 01/25/12, 58:22-25, 59:1-9.

190. WGS� is a critical portion of the City’s overall ISWMP, 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. See Tr. 07/01/09, 178:10-18, 181:7-18; see also Steinberger Written Testimony at 2, 4. The ISWMP is required by State law and approved by DOH after public comments. See Tr. 07/01/09, 182:18–183:25. One theme of the ISWMP is to minimize landfill disposal. Id. at 184:1-3.

191. In Calendar Year 2010, approximately 1,214,904 tons of waste was generated on Oahu. Of the 1,214,904 tons, the landfill received only 163,736 tons of MSW and 179,946 tons of ash and residue from HPOWER. The amount of MSW deposited at the WGS� reflects a steady decrease from 2009. In FY09 the landfill received approximately 178,512 tons of MSW

and in FY10 some 233,065 tons of MSW. In comparison, ash and residue has remained fairly constant. The 2010 disposal rate represents a total diversion of MSW from the landfill of 71.7%.

See 2011 Exhibit "A27."

192. Other items that cannot be recycled or burned at HPOWER are deposited at the WGSL. At the time of the contested case hearing on the 2011 Application, items such as screenings and sludge from sewage treatment plants, animal carcasses, tank bottom sludge, contaminated food waste that cannot be recycled, medical sharps, auto shredder residue, and contaminated soil that is below certain toxicity levels were landfilled at the WGSL. See Tr. 01/25/12, 10:6–12:14; TR. 04/11/12, 118:16–119:23.

193. The City is actively reducing waste volumes that are directed to the landfill. H-POWER capacity will increase with its expansion so that it can receive an additional 300,000 tons per year of MSW by 2013. See Tr. 07/01/09, 185:8-25; see also Steinberger Written Testimony at 18. The expanded HPOWER facility will be able to burn items that the current facility cannot, and which therefore have been sent to the landfill. See Tr. 07/01/09, 186:17–187:12; see also Steinberger Written Testimony at 19.

194. The City continues to increase its recycling efforts and has accomplished expansion of island-wide curbside recycling – 160,000 residences – as of May 2010. Steinberger Written Testimony at 20.

195. The City has a facility at the Sand Island Wastewater Treatment Plant that digests, dewater, and heat-dries approximately 20,000 tons per year of sewage sludge and turns the biosolids that might otherwise be sent to a landfill into pellets that can be used as a fertilizer or soil amendment material. Steinberger Written Testimony at 23.

196. By 2013, when HPOWER's third boiler is expected to be operational, the City through its various solid waste management programs expects to divert eighty percent of the waste stream, with the remaining twenty percent being landfilled at WGSL. See 07/01/09 at 201:9-16. There will be few cities that can match that rate of landfill diversion. Id. at 195:4-8.

197. Despite progress made to divert waste from the landfill via recycling, burning waste for energy, and reuse, a landfill is still needed on Oahu. See Tr. 01/25/12, 12:7-14; 03/07/12, 99:22-100:1; 04/11/12, 117:5-121:5.

198. The continued availability of WGSL to dispose of MSW is needed because WGSL is required as a permit condition to operate H-POWER. Steinberger Written Testimony at 29.

199. The continued availability of WGSL to dispose of MSW is needed for cleanup in the event of a natural disaster. See Tr. 01/25/12, 12:8-14; Tr. 04/04/12, 150:10-15.

200. The continued availability of WGSL to dispose of MSW is needed because there will always be material that cannot be combusted, recycled, reused or shipped. See Tr. 04/11/12, 117-122:5; 2011 Exhibit "A18."

201. It will take at least seven years from site selection for a new landfill site to be operational. See Tr. 04/04/12, 56:1-58:17; Tr. 4/11/12, 41:2-42:6; Tr. 04/11/12, 73:19-74:5; 122:6-123:12.

202. Therefore, the WGSL is currently necessary for proper solid waste management, the lack of which would potentially create serious health and safety issues for the residents of Oahu. See Tr. 01/25/12, 12:15-19, 65:14-20; 04/04/12, 149:24-150:25.

203. Closing the WGSL to MSW without alternative disposal options will endanger public health. See Tr. 01/25/12, 12:15-19; 04/04/12, 149:2-151:4.

#### **IV. STATE AND COUNTY LAND USE LAW AND REGULATIONS**

204. The continued operation of the landfill and the requested expansion project comply with the guidelines as established by the Planning Commission and the LUC. See Tr. 06/22/09, 68:3-13; 2008 Application 2-1 through 2-28.

205. The continued operation of the landfill and the requested expansion project are consistent with various provisions of the Hawaii State Plan. See Tr. 06/22/09, 69:4-6; 2008 Application at 2-2 through 2-8.

206. The continued operation of the landfill and the requested expansion project are consistent with the energy functional plan. The WGSF is a generator of naturally occurring methane and other landfill gases, and these gases are planned to be recovered by the City for use in the generation of electricity through a landfill gas-to-energy system. See 2009 Exhibit "A1" at 8-9; Tr. 06/22/09, 70:1-12.

207. The continued operation of the landfill and the requested expansion project are consistent with the recreational functional plan. The Property can be reclaimed for other purposes that include outdoor recreation; for example, Kakaako Waterfront Park once served as a landfill in Honolulu. See 2009 Exhibit "A1" at 8-10; Tr. 06/22/09, 70:13-71:2.

208. The continued operation of the landfill and the requested expansion project are consistent with the City's General Plan. The WGSF is an important public facility that will provide a necessary facility to meet future population needs and accommodate growth in the region; WGSF's eventual closure will allow the Property to be reclaimed for other public uses; and the WGSF is needed in the event of a natural disaster. See Tr. 06/22/09, 71:8-72:25; 2009 Exhibit "A1" at 8-25 through 8-28.

209. The continued operation of the landfill and the requested expansion project are consistent with the Ewa Development Plan because the facilities map contained therein designates the landfill with the appropriate symbol. See Tr. 06/22/09, 73:9-74:12; 2009 Exhibit "A1" at 8-28 through 8-29.

210. The continued operation of the landfill and the requested expansion project are consistent with City zoning because a landfill is considered a "public use" under the Land Use Ordinance, and "public uses and structures" are deemed permitted uses in every City zoning district, without the need for a permit. See 2008 Application at 2-28 through 2-29; Tr. 06/22/09, 75:5-22.

### **PROPOSED FINDINGS OF FACT OR CONDITIONS**

Any proposed findings of fact or conditions submitted by the Applicant or Intervenors that are not expressly ruled upon by the Planning Commission by adoption herein, or rejected by clearly contrary findings of fact, are hereby denied and rejected.

### **LABELING OF FINDINGS OF FACT AND CONCLUSIONS OF LAW**

To the extent that any of the foregoing Findings of Fact are more properly deemed to be Conclusions of Law, they are incorporated herein as Conclusions of Law. Should any of the following Conclusions of Law be more properly deemed Findings of Fact, they are incorporated herein as Findings of Fact.

### **CONCLUSIONS OF LAW**

The Planning Commission hereby concludes as follows:

1. The Planning Commission has jurisdiction to hold public hearings and make recommendations on all proposals to adopt or amend the general plan, development plans and zoning ordinances, and to approve special use permits for unusual and unreasonable uses within

agricultural and rural districts other than those for which the district is classified in accordance with the RPC. Section 6-1506(b), Revised Charter of the City and County of Honolulu 1973 (2000 Edition); Hawaii Revised Statutes Section 205-6(a).

2. Hawaii Revised Statutes Section 91-10(5) provides that:

[T]he party initiating the proceeding shall have the burden of proof, including the burden of producing evidence as well as the burden of persuasion. The degree or quantum of proof shall be a preponderance of the evidence.

The Applicant has the burden of proof to show by a preponderance of the evidence that the Application meets the provisions of Section 2-45 of the RPC.

3. The Applicant seeks a new State Special Use Permit. Chapter 2, Subchapter 4 of the RPC, sets forth the rules applicable to State Special Use Permits. Section 2-45 of the RPC provides as follows:

Test to be applied. Certain 'unusual and reasonable' uses within agricultural districts other than those for which the district is classified may be permitted. The following guidelines are established in determining an 'unusual and reasonable' use:

(a) Such use shall not be contrary to the objectives sought to be accomplished by the state land use law and regulations.

(b) That the desired use would not adversely affect the surrounding property.

(c) Such use would not unreasonably burden public agencies to provide roads and streets, sewers, water, drainage and school improvements, and police and fire protection.

(d) Unusual conditions, trends and needs have arisen since the district boundaries and regulations were established.

(e) That the land upon which the proposed use is sought is unsuited for the uses permitted within the district.

4. Based on the findings set forth above, the Planning Commission concludes that the Applicant's request for a new State Special Use Permit (a) is not contrary to the objectives sought to be accomplished by the state land use law and regulations; (b) would not adversely affect surrounding property as long as operated in accordance with governmental approvals and

requirements, and mitigation measures are implemented in accordance with the Applicant's representations as documented in the 2008 FEIS; and (c) would not unreasonably burden public agencies to provide roads and streets, sewers, water, drainage and school improvements, or police and fire protection. The Planning Commission further concludes that the same unusual conditions, trends and needs that existed at the time the original Special Use Permit was granted continue to exist and that the land on which the WGSL is located continues to be unsuited for agricultural purposes.

5. The Planning Commission concludes that the Applicant has met its burden of proof with respect to the provisions set forth in Section 2-45 of the RPC.

#### **DECISION AND ORDER**

Pursuant to the foregoing Findings of Fact and Conclusions of Law, it is the decision and order of the Planning Commission to APPROVE Applicant's Application in File No. 2008/SUP-2, for a SUP for the existing and proposed expansion of WGSL and for continued operation of WGSL, located at Tax Map Key Nos. 9:2-3: Parcels 72 and 73, totaling approximately 200.622 acres, until capacity as allowed by the DOH is reached, subject to the following conditions:

1. On or before November 1, 2010, the Applicant shall begin to identify and develop one or more new landfill sites that shall either replace or supplement the WGSL. The Applicant's effort to identify and develop such sites shall be performed with reasonable diligence, and the Honolulu City Council is encouraged to work cooperatively with the Applicant's effort to select a new landfill site on Oahu. Upon the selection of a new landfill site or sites on Oahu, the Applicant shall provide written notice to the Planning Commission. After receipt of such written notice, the Planning Commission shall hold a public hearing to reevaluate

2008/SUP-2 and shall determine whether modification or revocation of 2008/SUP-2 is appropriate at that time.

2. The Applicant shall continue its efforts to use alternative technologies to provide a comprehensive waste stream management program that includes HPOWER, plasma arc, plasma gasification and recycling technologies, as appropriate. The Applicant shall also continue its efforts to seek beneficial reuse of stabilized, dewatered sewage sludge.

3. The Applicant shall provide, without any prior notice, annual reports to the Planning Commission regarding the status of identifying and developing new landfill sites on Oahu, the WGSL's operations, and Applicant's compliance with the conditions imposed herein. The annual reports shall also address the Applicant's efforts to use alternative technologies, as appropriate, and to seek beneficial re-use of stabilized, dewatered sewage sludge. The annual reports shall be submitted to the Planning Commission on June 1 of each year subsequent to the date of this Decision and Order.

4. WGSL shall be operational only between the hours of 7:00 a.m. and 4:30 p.m. daily, except that ash and residue may be accepted at the Property 24 hours a day.

5. The Applicant shall coordinate construction of the landfill cells in the expansion area and operation of WGSL with Hawaiian Electric Company, with respect to required separation of landfill grade at all times and any accessory uses from overhead electrical power lines.

6. The operations of the WGSL under 2008/SUP-2 (SP09-403) shall be in compliance with the requirements of Section 21-5.680 of the Revised Ordinances of the City and County of Honolulu 1990, to the extent applicable, and any and all applicable rules and regulations of the DOH.



7. The Planning Commission may at any time impose additional conditions when it becomes apparent that a modification is necessary and appropriate. Minor modifications may be approved by the Director of Planning and Permitting.

8. Enforcement of the conditions to the Planning Commission's approval of 2008/SUP-2 (SP09-403) shall be pursuant to the Rules of the Planning Commission, including the issuance of an order to show cause why 2008/SUP-2 (SP09-403) should not be revoked if this Commission has reason to believe that there has been a failure to perform the conditions imposed herein by this Decision and Order.

9. The Applicant shall notify the Planning Commission of termination of the use of the Property as a landfill for appropriate action or disposition of the SUP.

10. Municipal solid waste shall be allowed at WGSL through December 31, 2026. Thereafter, only municipal solid waste that cannot be reasonably processed at HPOWER or another facility owned or under contract with the City ("other facility") shall be allowed at WGSL.

11. During periods of scheduled facility maintenance, such as a shut-down of one or more boilers at HPOWER, municipal solid waste that would otherwise be processed at HPOWER or other facility may be disposed of at WGSL.

12. If the Director of the Department of Environmental Services reasonably determines that HPOWER or other facility cannot accept the municipal solid waste or there is an emergency, the municipal solid waste may be disposed of at WGSL.

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IT IS FURTHER ORDERED that the Special Use Permit under File No. 86/SUP-5 is hereby withdrawn, and any conditions previously placed on the Property shall be null and void.

DATED: Honolulu, Hawaii, January 27, 2017.

DONNA Y. L. LEONG  
Corporation Counsel

By   
KAMILLA C. K. CHAN  
Deputy Corporation Counsel

Attorneys for Applicant  
DEPARTMENT OF ENVIRONMENTAL  
SERVICES, CITY AND COUNTY OF  
HONOLULU

09-01760/548823

BEFORE THE PLANNING COMMISSION  
OF THE CITY AND COUNTY OF HONOLULU

STATE OF HAWAII

In the Matter of the Application of

DEPARTMENT OF ENVIRONMENTAL  
SERVICES, CITY AND COUNTY OF  
HONOLULU

For a New Special Use Permit To Supersede  
Existing Special Use Permit To Allow A  
92.5-Acre Expansion And Time Extension For  
Waimanalo Gulch Sanitary Landfill,  
Waimanalo Gulch, O'ahu, Hawai'i, Tax Map  
Key No. (1) 9-2-03: 72 And 73,

In the Matter of the Application of

DEPARTMENT OF ENVIRONMENTAL  
SERVICES, CITY AND COUNTY OF  
HONOLULU

To delete Condition No. 14 of Special Use  
Permit No. 2008/SUP-2 (also referred to as  
Land Use Commission Docket No. SP09-403)  
which states as follows:

"14. Municipal solid waste shall be allowed at  
the WGS� up to July 21, 2012, provided that  
only ash and residue from H-POWER shall be  
allowed at the WGS� after July 31, 2012."

FILE NO. 2008/SUP-2

CERTIFICATE OF SERVICE

CERTIFICATE OF SERVICE

I HEREBY CERTIFY THAT A COPY OF THE DEPARTMENT OF  
ENVIRONMENTAL SERVICES, CITY AND COUNTY OF HONOLULU'S PROPOSED  
FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION AND ORDER was

duly served by either hand-delivery or U. S. Mail, postage prepaid, by certified mail, return receipt requested, to the following on the date below, addressed as follows:

	<u>Mail</u>	<u>Delivery</u>
IAN L. SANDISON, ESQ. DEAN H. ROBB, ESQ. TIMOTHY LUI-KWAN, ESQ. Carlsmith Ball LLP 1001 Bishop Street, Suite 2200 Honolulu, Hawaii 96813	X	
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Attorneys for Intervenors KO OLINA COMMUNITY ASSOCIATION and MAILE SHIMABUKURO		
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Attorney for Intervenor COLLEEN HANABUSA		
DEPARTMENT OF PLANNING AND PERMITTING City and County of Honolulu 650 South King Street, 7th Floor Honolulu, Hawai'i 96813		X

DATED: Honolulu, Hawai'i, January 27, 2017.



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KAMILLA C. K. CHAN  
Deputy Corporation Counsel