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 CITY AND COUNTY OF HONOLULU

DEPT OF PLANNING
 AND PERMITTING
 CITY & COUNTY OF HONOLULU

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BEFORE THE PLANNING COMMISSION
 OF THE CITY AND COUNTY OF HONOLULU

STATE OF HAWAII

In the Matter of the Application of)	FILE NO. 2008/SUP-2
)	
DEPARTMENT OF ENVIRONMENTAL)	DEPARTMENT OF ENVIRONMENTAL
SERVICES, CITY AND COUNTY OF)	SERVICES, CITY AND COUNTY OF
HONOLULU)	HONOLULU'S FIRST AMENDED LIST OF
)	EXHIBITS; CERTIFICATE OF SERVICE
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 WGSL up to July 31, 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 FIRST AMENDED LIST OF EXHIBITS

COMES NOW DEPARTMENT OF ENVIRONMENTAL SERVICES, CITY AND COUNTY OF HONOLULU (hereinafter, "Applicant"), by and through its attorneys, DANA VIOLA and ROBERT BRIAN BLACK, Deputies Corporation Counsel, and hereby submits its First Amended List of Exhibits and Exhibits "A1" – "A33" regarding Applicant's request 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 WGSJ up to July 31, 2012, provided that only ash and residue from H-POWER shall be allowed at the WGSJ after July 31, 2012.

The First Amended List of Exhibits is a list of exhibits that may be used in support of the Applicant's case pursuant to the pre-hearing conference held on October 14, 2011. Applicant reserves the right to amend its First Amended List of Exhibits and identify any additional exhibits not expressly identified above for rebuttal purposes in response to any pleadings, arguments, exhibits, issues, and witnesses identified by any party pursuant to the Rules of the Planning Commission Section 2-71(c).

DATED: Honolulu, Hawaii, December 13, 2011.

ROBERT CARSON GODBEY
Corporation Counsel

By  _____

DANA VIOLA
ROBERT BRIAN BLACK
Deputies Corporation Counsel
Attorneys for Applicant
DEPARTMENT OF ENVIRONMENTAL
SERVICES, CITY AND COUNTY
OF HONOLULU

EXHIBIT NUMBER	DESCRIPTION	PARTY: OBJECTIONS	ADMIT
A1	Compact Disc containing "Final Environmental Impact Statement; Waimanalo Gulch Sanitary Landfill Lateral Expansion; Waimanalo Gulch, Oahu, Hawaii; TMKs (1) 9-2-003:072 and 073" (the "Final EIS")		
A2	Fly-over photo of Waimanalo Gulch Sanitary Landfill ("WGSL"), dated April 2011		
A3	Table reflecting remaining airspace at WGSL, dated April 2011		
A4	Solid Waste Management Permit No. LF-0182-09, dated June 4, 2010		
A5	Findings of Fact, Conclusions of Law and Decision and Order, Land Use Commission, Docket No. SP87-362, April 20, 1987		
A6	Findings of Fact, Conclusions of Law and Decision and Order, Land Use Commission, Docket No. SP87-362, October 31, 1989		
A7	Findings of Fact, Conclusions and Decision, Planning Commission of the City and County of Honolulu, Docket 2002/SUP-6, March 13, 2003		

Applicant reserves the right to amend its LIST OF EXHIBITS and identify any additional exhibits not expressly identified above for rebuttal purposes in response to any pleadings, arguments, exhibits, issues, and witnesses identified by any party pursuant to the pre-hearing conference held on October 14, 2011 and the Rules of the Planning Commission Section 2-71(c).

EXHIBIT NUMBER	DESCRIPTION	PARTY: OBJECTIONS	ADMIT
A8	Decision and Order Approving Amendment to Special Use Permit, Land Use Commission, Docket No. SP87-362, June 9, 2003		
A9	Office of Information Practices Opinion Letter No. 04-01, January 13, 2004		
A10	Order Granting In Part and Denying In Part Motion to Amend and/or Stay the Decision and Order Approving Amendment to Special Use Permit Dated June 3, 2003, Land Use Commission, Docket No. SP 87-362, May 10, 2004		
A11	Resolution No. 04-348, CD1, FD1		
A12	Bill 37 (2005), CD2		
A13	Mayor's Message No. 037, February 28, 2006		
A14	State Special Use Permit no. 86/SUP-5, In re Department of Environmental Services, City and County of Honolulu (FKA Department of Public Works, City and County of Honolulu); Application to Modify (1) the Findings of Fact, Conclusions and Decision dated March 13, 2003, and (2) the Decision and Order Approving Amendment to Special Use Permit Issued June 9, 2003, filed with the Department of Planning and Permitting on July 6, 2007, without accompanying exhibits		
A15	Findings of Fact, Conclusions of Law, and Decision and Order, Planning Commission of the City and County of Honolulu, Ewa -- State Special Use Permit No. 86/SUP-5 (RY), January 18, 2008		

EXHIBIT NUMBER	DESCRIPTION	PARTY: OBJECTIONS	ADMIT
A16	Findings of Fact, Conclusions of Law, and Decision and Order Adopting with Modifications, the City and County of Honolulu Planning Commission's Recommendation to Approve Amendment to Special Use Permit, Land Use Commission Docket No. SP87-362, March 14, 2008		
A17	Transcript of July 31, 2009, decision-making hearing of Planning Commission of the City and County of Honolulu		
A18	Findings of Fact, Conclusions of Law, and Decision and Order, Planning Commission of the City and County of Honolulu, File Nos. 2008/SUP-2 (RY) and 86/SUP-5, August 4, 2009		
A19	Order Adopting the City and County of Honolulu Planning Commission's Findings of Fact, Conclusions of Law, and Decision and Order With Modifications, Land Use Commission Docket No. SP09-403, October 22, 2009		
A20	Order Granting Defendants Department of Environmental Services, Department of Planning and Permitting, and City and County of Honolulu's Motion for Summary Judgment filed on February 2, 2010, Civil No. 08-1-2562-12 RAT, March 25, 2010		
A21	Order Affirming 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 Dated October 22, 2009 with Modifications, Civil No. 09-1-2719-11, September 21, 2010		
A22	Executive Summary, Integrated Solid Waste Management Plan		

EXHIBIT NUMBER	DESCRIPTION	PARTY: OBJECTIONS	ADMIT
A23	Letter from United States Department of Agriculture notifying of cancellation of Compliance Agreements No. Oahu RG002 and HMSW001, dated August 11, 2010		
A24	Order Granting Plaintiffs' Motions for Preliminary Injunction Hearing and Motion for Expedited Hearing, Denying Motion to Strike Declaration, and Requiring Setting of Scheduling Conference, Confederated Tribes and Bands of the Yakama Nation, et al., v. United States Department of Agriculture, et al., No. CV-10-3050-EFS, August 30, 2010.		
A25	Testimony submitted by the Chairman of the Confederated Tribes and Bands of the Yakama Nation, October 5, 2011 Public Hearing of the Planning Commission of the City and County of Honolulu		
A26	Chart Depicting Total Waste Stream Flow on Oahu		
A27	Chart Depicting Municipal Solid Waste Stream Flow on Oahu		
A28	Charts Showing Yearly Recycling Rates (1988-2010)		
A29	Chart Depicting The Sustainable Solid Waste Management Ladder for the U.S.		
A30	Curbside Recycling Program Evaluation and Strategic Planning Report		
A31	Agendas, Group Memories, and Documentation Provided to Landfill Advisory Committee for meetings held on January 20, February 10, March 10 and 31, May 12, June 23, and July 21, 2011.		

EXHIBIT NUMBER	DESCRIPTION	PARTY: OBJECTIONS	ADMIT
A32	Letter From the United States Department of Agriculture notifying Hawaiian Waste Systems, LLC of the suspension of operations under Compliance Agreement No. Oahu RG002.		
A33	Supplemental Report for Resolution 11-182: "Alternative Technologies for the Treatment and Minimization of Sewage Sludge," dated November 2011.		

11-01661/205820

Volume 1 of 3

Final Environmental Impact Statement

Prepared in Accordance with Chapter 343, Hawaii Revised Statutes and
Title 11, Chapter 200, Hawaii Administrative Rules

***Waimānalo Gulch Sanitary
Landfill Lateral Expansion***

Waimānalo Gulch, O‘ahu, Hawai‘i
TMKs: (1) 9-2-003: 072 and 073

October 2008

City and County of Honolulu
Department of Environmental Services
1000 Uluohia Street, 3rd Floor
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Final Environmental Impact Statement

Waimānalo Gulch Sanitary Landfill Lateral Expansion

Waimānalo Gulch, O'ahu, Hawai'i

TMKs: (1) 9-2-003: 072 and 073

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Prepared Pursuant to
Chapter 343, Hawai'i Revised Statutes, and
Title 11, Chapter 200, Hawai'i Administrative Rules

By

City and County of Honolulu
Department of Environmental Services
Kapolei, Hawai'i 96707

October 10, 2008

Date



Eric S. Takamura, Ph.D., P.E., Director
Department of Environmental Services
City and County of Honolulu

This document and all ancillary documents were prepared under my direction or supervision.
This information, to the best of my knowledge, fully addresses document content requirements
as set forth in HAR, Section 11-200-17 and 11-200-18, as applicable.

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List of Acronyms

ADC	Alternate Daily Cover
AGL	Above Ground Level
AIS	Archaeological Inventory Survey
AMP	Archaeological Mitigation Plan
AMSL	Above Mean Sea Level
APE	Area of Potential Effect
APHIS	U. S. Animal and Plant Health Inspection Services
ASR	Automobile Shredder Residue
BMSL	Below Mean Sea Level
BWS	Board of Water Supply
CFR	Code of Federal Regulations
CMP	Corrugated Metal Pipe
CS	Charter School
CSH	Cultural Surveys Hawai'i, Inc. (Archaeologists)
CWA	Clean Water Act
CWRM	Commission on Water Resource Management
CY	Cubic yards
DDC	Department of Design and Construction, City & County of Honolulu
DEIS	Draft Environmental Impact Statement
DLNR	State Department of Land and Natural Resources
DOH	State Department of Health
DPP	Department of Planning and Permitting, City & County of Honolulu
DPR	Department of Parks and Recreation, City & County of Honolulu
EISPN	Environmental Impact Statement Preparation Notice
ENV	Department of Environmental Services, City & County of Honolulu
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
F	Fahrenheit

FAA	Federal Aviation Administration
FCC	Federal Communications Commission
Ft/d	Feet per day
FEIS	Final Environmental Impact Statement
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
GCCS	Gas Collection and Control System
GHG	Greenhouse gas or gasses
GPS	Global Positioning System
GPZ	Groundwater Protection Zone
HAR	Hawai'i Administrative Rules
HDPE	High Density Polyethylene
HECO	Hawaiian Electric Company
HFD	Honolulu Fire Department
HPD	Honolulu Police Department
H-POWER	Honolulu Program of Waste Energy Recovery
HRS	Hawai'i Revised Statutes
HWS	Hawaii Waste Systems, LLC
Kg	Kilogram
KOP	Knock-Out Pot
KV	Kilovolt
LCA	Land Court Award
LEL	Lower explosive limit
LFG	Landfill Gas
LCRS	Leachate Collection and Recovery System
LFTGE	Landfill to Gas Energy
LLC	Limited Liability Company
LUO	Land Use Ordinance
ug/L	Micrograms per liter
mg/L	Milligrams per liter
MSHA	Mine Safety and Health Administration
MSL	Mean Sea Level
MSW	Municipal Solid Waste

MTY	Metric tons per year
MW	Monitoring well
NAAQS	National Ambient Air Quality Standards
NESHAPS	National Emission Standards for Hazardous Air Pollutants
NPDES	National Pollutant Discharge Elimination System (Permitting program administered by the DOH)
NMOC	Non-methane organic compounds
NOI	Notice of Intent
NOV	Notice of Violation
NSPS	New Source Performance Standards
NVO	Notice of Violation and Order
OEQC	Office of Environmental Quality Control
OHA	Office of Hawaiian Affairs
OIBC	O‘ahu Island Burial Council
PM	Particulate matter
PWCG	Pacific Waste Consulting Group
PWED	Public Works and Economic Development
PPQ	Local office of USDA, APHIS
PVC	Polyvinyl Chloride
RCRA	Resource Conservation and Recovery Act
RDF	Refuse Derived Fuel
RFP	Request for Proposals
ROH	Revised Ordinances of Honolulu
SIWWTP	Sand Island Wastewater Treatment Plant
SHPD	State Historic Preservation Division
SIHP	State Inventory of Historic Properties
SDTC	Sustainable Development Technology Canada
SPCC	Spill Prevention Control and Countermeasure
SWIM	Solid Waste Integrated Management
TMK	Tax Map Key
TDS	Total dissolved solids
TPD	Tons per day
TPY	Tons per year

UH	University of Hawai'i
UIC	Underground Injection Control
USDA	U.S. Department of Agriculture
WCCHC	Wai'anāe Coast Comprehensive Health Center
WGSL	Waimānalo Gulch Sanitary Landfill
WIC	Women, Infants, and Children
WMH	Waste Management of Hawai'i, Inc.
WTE	Waste to Energy
WWTP	Wastewater Treatment Plant

Project Summary

Project:	Waimānalo Gulch Sanitary Landfill Lateral Expansion
Proposing Agency:	City & County of Honolulu Department of Environmental Services 1000 Uluohia Street, 3rd Floor, Kapolei, Hawai'i 96707 Eric S. Takamura, Ph.D., P.E., Director
Accepting Authority:	City & County of Honolulu Department of Planning and Permitting On Behalf of the Mayor 650 South King Street, Honolulu, Hawai'i 96813 Henry Eng, FAICP, Director
TMK:	(1) 9-2-03: Parcels 072 and 073
Location:	Waimānalo Gulch, Island of O'ahu
Project Area:	92.5 acres are proposed for the lateral expansion. The total Waimānalo Gulch Sanitary Landfill property is 200 acres.
FEIS Preparers:	R. M. Towill Corporation 2024 North King Street, Suite 200 Honolulu, Hawai'i 96819 Contact: Brian Takeda, Planning Project Coordinator
County Zoning:	Ag-2, General Agricultural District
State Land Use:	Agricultural
Existing Land Uses:	The Waimanalo Gulch Sanitary Landfill property is used by the City & County of Honolulu for a municipal sanitary landfill in accordance with EPA RCRA D requirements.
Proposed Action:	Lateral expansion of the Waimānalo Gulch Sanitary Landfill property for municipal sanitary landfill purposes and accessory uses
Permits that May be Required:	EPA, Title V, Clean Air Act, Covered Source Permit Federal Communications Comm. License, Radio Station Authorization Department of Health Solid Waste Management Permit National Pollutant Discharge Elimination System (NPDES), Permit Applications for Discharges of Storm Water Associated with Construction Activities (NOI C) and Industrial Activities (NOI B) State Special Use Permit, State Land Use District Boundary Amendment Grubbing, Grading, Stockpiling, and Building Permits

Section 1
Executive Summary

This ~~Draft~~ Final Environmental Impact Statement (EIS) has been prepared for the proposed Waimānalo Gulch Sanitary Landfill (WGSL) Lateral Expansion project, located in Waimānalo Gulch, O‘ahu, Hawai‘i. This ~~D~~EEIS has been prepared in accordance with Chapter 343, Hawai‘i Revised Statutes (HRS), and Chapter 11-200, Hawai‘i Administrative Rules (HAR), pertaining to the preparation of EIS documents.

1.1. Proposed Action

The Waimānalo Gulch Sanitary Landfill (WGSL) is an essential and necessary City & County of Honolulu facility that provides municipal and solid waste disposal for all the communities of O‘ahu. Refuse that is disposed of at the landfill includes Municipal Solid Waste (MSW); recycling residue; and, Honolulu Program of Waste Energy Recovery (H-POWER) ash and residue¹. The landfill has been in operation since 1989 and has capacity remaining with the unused 92.5 acres of the approximately 200 acre property for an estimated minimum life of approximately 15 years². This will extend the use of the site beyond November 1, 2009³, the date the amended State Special Use Permit will prohibit the further acceptance of waste at the WGSL.

In addition to the expansion of the area of landfilling, the proposed project will involve the development of landfill associated support infrastructure (e.g., drainage, access roadways, landfill gas and leachate collection and monitoring systems, stockpile sites and other related features), a public drop off center, and a landfill gas to energy (LFGTE) system.

¹ See Section 4.2.1. Waste Accepted at Landfill, for details on waste permitted for disposal at WGSL.

² Based on no unforeseen circumstances including natural or other disasters that would require disposal of clean up or recovery related debris. In such an event space at the landfill could be exhausted sooner.

³ In March 2008, the State Land Use Commission approved the extension of time for the State Special Use Permit allowing the use of the current area of landfilling from May 1, 2008 to November 1, 2009.

1.2. Alternatives Considered

1.2.1. Introduction

The following alternatives to the proposed project were evaluated:

No Action - Landfilling at the Waimānalo Gulch Sanitary Landfill would cease on November 1, 2009, with no alternative site or technology available.

Delayed Action - The action on the permit would be delayed. Given the time needed to process the permits, the delayed and no action alternatives have the same effect.

Transshipment - O'ahu's MSW would be baled and transported to a mainland landfill for disposal. Even with this alternative, not all MSW can be transshipped.

Alternative Technologies - Technologies other than landfilling that could reduce the amount of material requiring disposal and generate electricity or another beneficial reuse product. Alternative technologies that were considered include:

- Thermal and non-thermal technologies;
- Enhanced recycling;
- The expansion of H-POWER; and
- Alternative methods of landfilling, such as the disposal of ash and MSW in the same cell, and use of a bioreactor landfill.

Alternative Sites - Alternative sites on O'ahu for the landfill. The five alternative landfill sites considered in the analysis were:

- Ameron Quarry;
- Mā'ili Quarry;
- Makaiwa Gulch;
- Nānākuli B; and
- Waimānalo Gulch Sanitary Landfill.

1.2.2. No Action Alternative

The No Action Alternative, which would involve taking no further action to extend the use of the WGSL was rejected because the consequences would result in an unacceptable health, safety, and economic impact to all communities on O'ahu.

1.2.3. Delayed Action Alternative

The Delayed Action Alternative involves delaying further effort to extend the use of the WGSL. Because the Delayed Action and No Action Alternatives would have similar results, it was rejected.

1.2.4. Transshipment of Waste Off-Island

Waste transshipment involves the packaging of MSW for shipment to a disposal site located off-island. Transshipment is a potential alternative that can reduce the need for a municipal sanitary landfill, but cannot completely replace it because of major issues.

1.2.5. Alternative Technologies to Refuse Disposal

There are currently no alternatives that have been proven to completely eliminate the need for a landfill. Alternative technologies reduce the demand for a landfill, but some residue will need to be disposed of in a landfill. The alternative technologies considered included (PWCG, 2008)⁴:

1. Non Thermal Technologies: (1) Anaerobic Digestion; (2) Aerobic Digestion; and (3) Hydrolysis
2. Thermal Technologies: (1) Plasma Arc; and (2) Gasification/Pyrolysis
3. Waste to Energy
4. Expanded Recycling: (2) Improvements to Recycling Infrastructure; and (2) Recycling to Energy
5. Wet Cell Landfill
6. Co-Disposal of MSW, Ash, and Residue

Conclusion Regarding Alternative Technologies

- Emerging or existing technology based approaches show promise for use in the City & County of Honolulu. However, none of the approaches are capable of completely eliminating the need for a municipal landfill.

⁴ See Section 9.5. Alternative Technologies to Refuse Disposal for further discussion.

- Some alternative technologies, such as hydrolysis (generation of process wastewater and other byproducts), involves the potential for environmental impacts that would require further examination.
- A number of the technologies that produce a secondary product, e.g., fuels for the generation of electricity or recovered plastic, metal, or glass products, do not have established commercial markets in the State.
- Certain alternative technologies such as waste to energy, are viable when considered as part of the City's waste management system. It is expected that other technologies and approaches will be developed as they mature and demonstrate feasible application in other municipalities.

1.2.6. Alternative Sites for a Municipal Landfill

A total of 42 landfill sites were evaluated for the proposed project. In addition to the evaluation of these sites, the City considered (1) the use of two more landfill sites for MSW and ash and residue, as well as (2) the use of two or more landfill sites to separately handle MSW in one landfill and ash and residue in another. The use of two or more sites was considered by ENV for the proposed project, but was not selected for consideration based on (FSEIS, Waimānalo Gulch Sanitary Landfill Expansion, 2002):

1. Land resources on O'ahu are finite and limited. Use of more than one landfill site for the disposal of MSW and/or ash and residue would foreclose or limit other alternative land uses that might otherwise be provided.
2. Potential for negative environmental impacts associated with the development of any landfill requires major effort to ensure mitigation. Development of two or more landfill sites would increase potential for negative environmental impacts and costs.
3. Economies of scale from an appropriately sized facility would generally result in more efficient use of land than two smaller facilities that may not be as easily planned from a landfill development perspective.

The sites that were considered are identified in **Table 1-1, Potential Landfill Sites**.

Table 1-1, Potential Landfill Sites

Site Name	TMK	Size (Acres)	Capacity (MM cy*)	Life (Years)
Auloa	4-2-14:por 1	55	2.8	4.7
Ameron Quarry	4-2-15:01	391	9.0	15.0
Barbers Point	9-1-16:18, por 1	15	0.7	1.2
Bellows	4-1-15: por. 01	173	7.5	12.5
Diamond Head Crater	3-1-42:por 6	115	4.3	7.2
Ewa No. 1	9-1-17	-	-	
Ewa No. 2	9-1-10	-	-	
Halawa A	9-9-10:8,9,por 10 & 26	40	1.5	2.5
Halawa B	9-9-10:27, por 10	60	2.2	3.7
Heeia Kai	4-6	-	-	
Heeia Uka	4-6-14:01	163	2.4	4.0
Honouliuli	9-1-17:por 4	22	1.7	2.8
Kaaawa	5-1	150	5.6	9.3
Kaena	6-9-1:por 3, 33 & 34	40	1.5	2.5
Kahaluu	4-7	-	-	
Kahe	9-2-3:por 27	200	7.4	12.3
Kalaheo (landfill reuse)	4-2-15:por 1 & 6	134	4.3	7.2
Kaloi	9-2-02:por 1; 9-2-3:por 2; 9-2-4:por 5	400	24.3	40.5
Kapaa No. 1	4-4-14:por 2	60	3.0	5.1
Kapaa No. 2 & 3 (closed)	4-2-15:por 1, 3, 4, 7	-	-	
Kaukonahua	7-1	34	1.3	2.2
Keekee	6-9-1:por 3 & 4, 6-9-3: por 2	40	1.2	2.0
Koko Crater	3-9-12: por 1	140	5.5	9.2
Kunia A	9-4-4: por 4	150	5.6	9.3
Kunia B	9-4-3: por 19	190	7.0	11.7
Maili	8-7-10:por. 03	200	9.2	15.3
Makaiwa	9-2-3: por. 02	338	15.0	25.0
Makakilo Quarry	9-2-3:82	175	10.0	16.7
Makua	8-1-1, 8-2-1	600	7.4	12.3
Mililani	9-5	34	2.2	3.7
Nanakuli A	8-7-9:1 & 3 and 8-7-21:26	179	4.0	6.7
Nanakuli B	8-7-9: pors. 1 & 7	432	9.4	15.6
Ohikilolo	8-3-1: 13	706	15.6	26.0
Olomana	4-2	-	-	
Poamoho	7-1	5	0.7	1.2
Punaluu	5-3	200	7.4	12.3
Sand Island	1-5-41	150	5.6	9.3
Waiahole	4-8	60	2.3	3.8
Waianae Expansion	8-5-3 and 6	140	6.8	11.3
Waihee	4-7	61	2.3	3.8
Waikane	4-8	200	9.0	15.0
Waimanalo Gulch Exp.**	9-2-3: 72 & 73	60	12.0	20.0
Waimanalo North	4-1-8: 13	171	9.6	16.0

* Million cubic yards (cy)

** Information has been updated since the Mayor's Committee Report, but prior to the preparation of this EIS. The current lateral expansion acreage is approximately 92.5 acres. The actual area of use may be changed as the design is refined and reviewed by government regulatory agencies.

Note: Based on Final EIS for Waimanalo Gulch Expansion, December 2002.

1.2.7. Preferred Alternative

Alternative technologies and the transshipment of waste show promise toward reducing the need for landfills. The generation of MSW that exceeds the processing capacity of H-POWER as well as the generation of ash and residue, however, requires a municipal landfill as part of the City's long term waste management system. (PWCG, 2008).

The time between preparation of this EIS and the date of compliance with the State LUC Order, November 1, 2009, is insufficient for the administrative processes to permit another alternative for all MSW and H-POWER refuse requiring disposal. The State LUC Order calling for a halt to the acceptance of any further MSW waste deliveries to the WGS� will come into effect on November 1, 2009. Even if this timeframe were extended the schedule for preparation and approval of a new alternative site can be expected to take several years. (PWCG, 2008).

The WGS� is the only alternative currently available to dispose of MSW and H-POWER ash and residue. Continued use of the WGS� until it has been filled to its physical capacity to accept waste is the Preferred Alternative (PWCG, 2008).

1.3. Potential Project Impacts and Mitigation Measures

Potential project impacts and proposed mitigation measures include:

1.3.1. Environmental Setting

Climate and Rainfall

The proposed project is not anticipated to result nor constitute a source of impact to the climate or rainfall resources of the project area or region.

Topography and Geology

Potential impacts are anticipated to involve changes to the landforms of the WGS� property and the underlying soils and site geology. Mitigation will involve updates to

technical studies and design documents to maintain the soils and geologic stability of the site. Based on the results, an appropriate design will be prepared and reviewed by the Department of Environmental Services (ENV), the DOH, and other regulatory agencies as required by law.

Surface Water

The proposed project will involve a review of the existing drainage system and its capacity to handle the planned area of expansion. Design, engineering and construction will be reviewed by regulatory agencies. Adverse effects to surface water are not anticipated.

Groundwater and Hydrology

There is potential for leachate entering brackish groundwater from the landfill. Mitigation to address this issue is currently provided through the existing Leachate Collection and Removal System (LCRS) design. As required, the LCRS system design will be modified to ensure against the potential for adverse effects to groundwater and hydrogeological resources of the site.

Natural Hazards

Adverse effects from the proposed project are not anticipated for the following:

Flood Zone - Drainage controls to handle storms have been implemented for the existing site. Future controls will be designed by the City and WMH to be consistent with the requirements for the State and City & County of Honolulu.

Hurricanes - Work procedures practiced within the existing area of landfilling will be practiced within the area of lateral expansion. The measures are designed to reduce the potential for loss of soils, MSW, and ash due to a hurricane or related heavy storm.

Seismic Activity (Earthquakes) - Seismic risk at the project site is minimal. The design of both the current sanitary landfill and the proposed area of lateral expansion will meet

the EPA Subtitle D (40 CFR Part 258) standard for stability. No further mitigation measures with regard to seismic activity are required or recommended.

Air Quality

Air quality is not anticipated to be adversely affected by the project. The following were evaluated:

Dust - Airborne dust will be the primary air pollutant. To reduce and mitigate the potential for the release of fugitive dust preventative measures will be practiced by the operator in accordance with the provisions of HAR, Chapter 11-60.1-33, Fugitive Dust. The generation of adverse dust levels from controlled blasting is not anticipated. This is based on the limited yield of the charge, subsurface placement, and nature of the controlled blasting which is designed to fracture rock and not displace earthen material.

Odor - Odors associated with the proposed project include vehicular odor, odors from the hauling of waste to the landfill, and odors as a result of landfill gas emissions.

Vehicular Odors and Exhausts - Exhaust emissions are mitigated by compliance of the landfill operator, commercial, and private vehicle operators with HAR, Chapter 60-1, Air Pollution Control, Subpart 1.34, Motor Vehicles. The site operator will also ensure that all vehicles and equipment associated with landfill operations are properly muffled and maintained in good operating condition.

Odors from Waste Hauling - Potential sources of odor include the delivery of refuse vehicles containing putrescible waste, sewage solids that cannot be processed by wastewater treatment plants, and other types of waste. Odor management will involve: (1) refuse vehicle processing and control; and (2) use of an odor neutralizing system.

Solid sewage sludge from the Sand Island Wastewater Treatment Plant (SIWWTP) that was previously disposed of at the WGSL is currently undergoing treatment in a waste digester recently installed at the ~~Sand Island Wastewater Treatment Plant (SIWWTP)~~. It is anticipated that as this system is brought to full operational capacity that the requirement for disposal of treated sludge solids will further decrease, eventually removing this source of odorous waste from the landfill.

Stabilized, dewatered sludge from the Honouliuli, Wai‘anae, Kailua Regional, and Kahuku Wastewater Treatment Plants, as well as from private sources, is landfilled at WGSL. The City is in the process of seeking beneficial uses for the stabilized, dewatering sludge from the Honouliuli WWTP.

Landfill Gas Associated Odor - The generation of landfill gas is controlled by use of a landfill gas collection and control system (GCCS) that was installed in 2005. The system is operating in accordance with requirements and no adverse effects due to the performance of the system to address landfill gas associated odor are anticipated.

Landfill Associated Gases - Landfill gases at WGSL are monitored in compliance with RCRA Subtitle D regulations, HAR Chapter 11-58, and the WGSL Solid Waste Permit (No.LF-0054-02). The monitoring regularly assesses the landfill and requires an appropriate response to address any exceedances in allowable standards. DOH may also establish other requirements. No adverse effects from landfill associated gases including methane, hydrogen, and other potential emissions are anticipated.

Acoustic Characteristics

The potential for adverse effects as a result of noise generated by the proposed project is not anticipated. The following will be provided:

Construction Vehicles and Equipment - Vehicles and equipment will produce noise. Mitigation of short-term potential construction impacts will involve compliance with the provisions of HAR Chapter 11-43, Community Noise Control. All internal combustion powered vehicles and equipment will be equipped with mufflers or other noise attenuation devices as required.

Construction Activity - Noise associated with construction activities are not anticipated to result in adverse effects to the surrounding area and region. Portions of the work that may affect the adjoining Makaiwa Gulch and the future planned Makaiwa Hills

development will be buffered by a ridge separating the two gulches. Other practices will be employed by WMH in coordination with the developers of Makaiwa Hills.

Rock Crushing - Rocks and boulders too large for use will be reduced in size with a rock crusher. Potential impacts include: generation of noise and dust; and visual impacts that could result if views of rock crushing equipment and machinery are readily visible from across the Farrington Highway and coastal shoreline.

Generation of noise will be within a relatively isolated portion of Waimānalo Gulch. The ridge between Waimānalo Gulch and Makaiwa Gulch will also serve to help to reduce potential noise impacts from the planned future Makaiwa Hills development. Other mitigation including the scheduling of rock crushing during normal landfill operating hours will be provided.

Controlled Blasting - Blasting will involve not more than one blast per day on an infrequent basis consisting of approximately one to three days per week, taking place toward the end of the work day. Potential noise effects are not expected to affect the surrounding community along Farrington Highway.

Flora and Faunal Resources

Flora

The results of the botanical survey indicate no special concerns or legal constraints related to botanical resources at Waimānalo Gulch (AECOS Consultants, Inc., 2007). No adverse effects to the flora resources at the WGSL are anticipated.

Fauna

Native and migratory birds were not observed at the property. There are no unique habitats. Similar areas occur all along the leeward side of Oahu. (Bruner, 2006). No adverse effects to the faunal resources at the WGSL are anticipated.

Scenic and Aesthetic Environment

The majority of the proposed project will not be visible from most vantage points along the Farrington Highway in the Wai'anāe or Kahe Point directions. The existing Kahe Point ridge line provides some screening of views of the landfill, including the proposed

expansion area. While some potential viewplane impacts are anticipated, mitigation measures have been proposed to eliminate or reduce the potential for adverse impacts.

The general area that fronts Waimānalo Gulch (i.e. from the Kai Lani subdivision to Ko Olina Beach Club) is expected to be the most impacted because activities can be seen from areas within this “view corridor”. Mitigation to reduce visual impacts has been initially implemented. Further landscaping will be implemented to address the dry conditions of the site that have hindered prior hydromulching and plantings.

Landscaping and the further use of irrigation will be used to promote vegetative growth similar to that found on the adjoining hillsides.

Views of refuse and construction vehicles in transit to and from the active areas of landfilling will be addressed with carefully located interior roads using the terrain to screen the vehicles. Carefully placed landscaping elements including trees or other tall vegetation will also be implemented.

Views toward the landfill along Farrington Highway, from the Wai‘anae side of the landfill, will be addressed with landscaping treatment, as appropriate, that will include the use of landscaping elements along the western ridge of the WGS� adjoining the Kahe Power Generating Station. This will require careful placement of landscaping elements to maintain views toward the ridgeline to respect the huaka‘i pō (procession of the night marchers) viewplane.

As much as possible, native trees, shrubs and groundcover will be integrated into the landscaping plan.

1.3.2. Public Services

Traffic and Circulation

The proposed project is not expected to generate additional vehicle trips. However, increased development islandwide may result in an increase in site-generated trips to the landfill since additional refuse vehicles may be required to service these areas.

No adverse impacts to traffic are anticipated or expected, however, the Traffic Impact Report recommends: (1) maintaining roadway widths, (2) turning radii, (3) sight

distance, and (4) on- and off-loading areas to prevent vehicles from queuing onto the highway. These recommendations will be maintained by WMH, and the owner of the facility, ENV.

Wastewater

The proposed project is not anticipated to result in potential for negative adverse impacts due to wastewater treatment. The project will not require upgrades to municipal wastewater service lines or to the Hono'uli'uli Wastewater Treatment Plant.

Potable/Drinking Water

The proposed project will be served by the existing Board of Water Supply (BWS) main along Farrington Highway. No major new construction involving the use of new water supply will be required for the lateral expansion of the landfill.

Power and Communications

Electrical power is provided from the Hawaiian Electric Company (HECO) by overhead service lines. Communications service is provided by Hawaiian Telecom. Use and operation of the planned area of lateral expansion will be coordinated with HECO to minimize the possibility of a disruption of service. The existing power and communications facilities are expected to be sufficient for the proposed project. No adverse impacts are anticipated.

Police and Fire Protection

The current level of police service provided to the WGS� is expected to be sufficient. ENV and WMH will maintain fire apparatus access throughout the site to ensure that fire fighting vehicles and equipment are capable of mobilizing to all locations. No adverse impacts are anticipated to police and fire protection services and no further mitigation is proposed.

Health Care and Emergency Services

The proposed project will involve the continuation of use of the site and does not represent a major increase in use that would require additional health care or emergency services beyond those presently provided. This use is not expected to require additional health care or emergency services beyond those presently available. No adverse impacts are anticipated

Education and Library Services

The proposed project is not expected to affect existing schools or libraries located in the region.

Parks and Recreation

The proposed project is anticipated to have potential impacts that are similar to existing conditions that include landfill associated odor, windblown litter, and visual impacts. The exception to these potential impacts, however, involves the location of the proposed project further mauka within the Waimānalo Gulch which will help to reduce potential odors directly attributable to the landfill, the control of windblown litter from working cells, and visibility of working activities on the landfill.

Control of Landfill Odor - The potential for odor from vehicles include: vehicles from residential and commercial sources; vehicles that carry treated sewage solids; and private self-haulers. Odors from refuse awaiting disposal involve a temporary condition in that once the refuse is buried and covered, the source of the odor is removed from exposure to the air column. Odors resulting from landfill decomposition are addressed with the LCRS and GCCS.

Control of Windblown Litter - Mitigative measures include:

- Use of permanent, temporary, and portable litter fences.
- Waste is processed and covered with cover material as soon as practicable.
- On-call or standby work crews are deployed concurrent with the acceptance of refuse at the WGSL.

- ENV will enforce existing rules, regulations, and procedural practices to reduce the incidence of windblown litter. Management personnel at WGS� also enforce the rule requiring all loads entering the landfill to be secured by use of a tarp, cover, or enclosure.

Visibility of Working Activities on the Landfill - Portions of the existing area of work are visible from various locations along Farrington Highway and the Ko Olina Resort (see Section 5.10. Scenic and Aesthetic Environment). Mitigation involves: (1) the location of the planned area of expansion further mauka and within the Waimānalo Gulch to minimize views into active areas of landfilling; and (2) the use of landscaping with trees and vegetative cover. While not all elements of the proposed project can be totally screened from view, the location of work and the careful placement of landscaping elements are expected to significantly reduce the potential for viewplane and aesthetic impacts.

1.3.3. Socioeconomic and Related Environment

Socioeconomic Characteristics

Public Facilities and Services

Police Protection, Fire Protection, Emergency and Medical Services - Extension of the landfill operations are not anticipated to result in adverse effects. WHM will provide adequate access for fire apparatus. WGS� and the surrounding communities are adequately serviced by EMS services.

Education and Library Services - Expansion of the WGS� Sanitary Landfill will not create the need for additional elementary schools, nor will it affect existing elementary schools differently than they are affected at the present time. No impacts to schools or libraries are anticipated.

Parks and Recreation - An expanded WGS� does not generate any additional demand for area parks. Odor issues and litter issues will be addressed by WMH and ENV. The

proposed expansion and continued use of WGSL will have no impact on the use of nearby parks. (SMS Research, 2008).

Other Social Impacts

Positive Social Impacts

Reduced Impact on Other O'ahu Communities - Moving the current landfill operation to another O'ahu location would only shift the potential for adverse impacts to another community, still requiring that the issues of litter, traffic, odors, and visual pollution be addressed and managed. (SMS Research, 2008).

Negative Social Impacts

Department of Health Issues - On December 7, 2007, ~~having addressed the two remaining counts identified in a DOH notice of violation (NOV)~~, the City and the DOH signed a settlement agreement which settled all issues arising from and related to the DOH Notice of Violation (NOV). According to WMH and the City, the public and the environment were never at risk at any time over the period of use of the site.

Property Values - The 2002 Socio-Economic Impact Assessment of the WGSL Expansion found single-family homes fit the hypothesis that property values increase with distance from the landfill up to a distance of about three miles. However, the condominium analysis shows a significant correlation of increased value and proximity to the landfill – the opposite result. (SMS Research, 2008)⁵.

Diminishing Community Trust - The failure to follow through on commitments by prior City administrations to close WGSL may be having an impact in eroding public trust and increasing cynicism toward City government. There appears to be general agreement among those interviewed that there has been insufficient community involvement (SMS Research, 2008).

Environmental Injustice - Interviewees point out that Leeward O'ahu is on the receiving end of many of O'ahu's burdens. Those interviewed argue the use and expansion of

⁵ See Appendix J, Socioeconomic Impact Assessment, in Volume 2 of 23 of this DEIS.

WGSL will only increase the imbalance of those impacts on Leeward O‘ahu. (SMS Research, 2008).

Proponents of keeping the landfill in operation point out that the siting of the landfill occurred long before the siting of several of the other examples noted above and had nothing to do with the demographics of surrounding communities. Furthermore, surrounding communities accommodate Ko Olina, abutting the Second City of Kapolei. This is the fastest growing region on O‘ahu and WGSL does not appear to have stymied its growth. This is not indicative of a community suffering from environmental injustice. (SMS Research, 2008).

Economic Impacts

Employment and Earnings

Construction - Expansion of WGSL is expected to take 10 years to complete. Pending the receipt of final engineering figures, the construction of the expansion has been estimated at \$86,000,000 over ten years. (SMS Research, 2008).

Employment - The net positive impact of the WGSL expansion will result in the creation of approximately 651 direct, indirect and induced person-years of employment. (SMS Research, 2008).

Earnings - The proposed project will result in an overall net positive impact on earnings. In total, approximately \$63.3 million in earnings will be generated. These earnings will boost the local economy, as many of the dollars will be used to purchase goods and services from other industries. (SMS Research, 2008).

Fiscal Impacts: State of Hawaii

The indirect and induced impact of this project will result in \$6.2 million in state tax revenues. In total, the project would result in an estimated positive impact of \$10.4 million in state tax revenues. (SMS Research, 2008).

The socioeconomic analysis did not take into account any indirect or induced economic effects of the landfill operation on surrounding businesses. There was insufficient,

verifiable information available at the time of the compilation of the report. As noted, the residential sales program at Ko Olina has been successful. If it could have been more successful without the landfill is speculative. (SMS Research, 2008).

Socioeconomic Mitigation Measures

Improving Current Practices

Views - WMH should continue to implement the on-site landscaping plans that have already been developed; especially for those areas facing south toward Ko Olina (SMS Research, 2008).

WMH should design and implement landscape screens (e.g., pines, tall hedges) along the berm and the access road that is visible from Farrington Highway, fronting the Kahe Power Plant. As an alternative, WMH might consider entering into a partnership with HECO to plant an effective screen of trees along Farrington Highway which would have the dual purpose of screening the landfill operations and the power plant from passing vehicles (SMS Research, 2008).

Landscaping plans have been prepared to screen exposed areas and views of landfill operations. Initial plantings have been started and will be augmented with new plantings. The west-facing stability berm along the upper access road shields views from some of the operations, but not all of it. Selected plantings, consistent with the area vegetation will be investigated for use as visual buffer.

Odor - WMH and the City should continue to be vigilant in processing the sludge from the sewage treatment plants upon delivery and in taking all means to reduce any odor impacts (SMS Research, 2008).

Diversion of some of the sludge for processing at the Synagro-WTT facility at SIWWTP and the improved performance of the odor neutralizing mist system appears to have had a significant positive impact. ~~However, WMH will pay continued attention to the performance of the Synagro system.~~

Litter - WMH must continue to monitor the egress and ingress of vehicles and continue to aggressively enforce the anti-littering regulations and fines (SMS Research, 2008).

WMH inspects and monitors trucks entering and leaving the landfill to ensure that loads are secured upon entry and that the trucks are free from debris before exiting. Citizens

and others who deliver trash without adequately secured loads generate windblown litter. Public education will be implemented by ENV and WMH to supplement the inspections.

ENV and WMH should maintain a direct communication link with the HPD; in the case of littering, it will lead to faster, more effective response (SMS Research, 2008). Additionally, this communication linkage should expand to the community most affected by the potential loss of refuse from vehicles traveling along public thoroughfares.

1. WMH and ENV will seek the participation of the HPD as a participant in the WGSL Oversight Advisory Committee.
2. WMH and ENV will notify the community through the WMH newsletter and the ENV website, opala.org, of the steps that the public can take to help with reporting highway littering.

Improving Community Involvement and Communications

Community Involvement

The City must effectively use the Oversight Advisory Committee (SMS Research, 2008).

A first step to improved use of the Oversight Advisory Committee is described above.

Other measures include:

1. Maintain and expand outreach, education, and coordination of landfill operations with the area neighborhood boards.
2. WMH will continue to extend and to expand visits to the landfill.
3. WMH will continue its outreach efforts with the adjoining (1) Ko Olina Community Association (KOCA) and the various homeowner/owner associations within Ko Olina; and (2) adjoining homeowners and residents in the area including Nānākuli and the planned Makaiwa Hills project.

The City should continue to contribute to a community benefits package for as long as the landfill exists (SMS Research, 2008).

The value of the community benefits have been identified as \$2.7 million in 2007 and will be \$2.0 million in 2008. The experience gained from current work by the City will be applied in the form of future modifications to improve the system.

The representation on the Committee that determines the benefits package should include all directly affected communities (SMS Research, 2008).

Identification of specific benefits that will be distributed and the parties that will be responsible for representing the communities involved remain on-going. Future information, including the names of participants involved will be provided by the City by website on opala.org or other agency website.

Website

WMH/ENV should use its web-sites aggressively as educational and communication tools (SMS Research, 2008).

The ENV website, opala.org will be used for the dissemination of future information including site tours (currently offered), the status of new technology undergoing evaluation, and other matters involving refuse management.

Improving the Commitment to Alternative Solutions to Landfilling

Alternatives to Landfills

The City should continue to invest in Research and Development, and where feasible, implement alternative technologies that will result in a reduction in the City's dependency on a landfill (SMS Research, 2008).

The City is actively involved in the investigation of feasible alternatives to landfilling. While no current alternative can completely remove the need for a landfill the City remains committed to research and utilization of methods as they prove feasible for taxpayers and the environment.

Alternative Locations

The City should continue to seek an alternative site to WGSL as the primary landfill location on O'ahu (SMS Research, 2008).

Prior to closure of the proposed project the City will initiate the search for O'ahu's next landfill site. Participation in this effort should be initiated within the next 10 years.

Land Use and Ownership

Regional and Local Land Uses

The region of 'Ewa surrounding the WGSL is composed of a mix of multiple land uses including residential, resort, recreational, business, commercial, and industrial uses. Other land uses including businesses, parks, schools, and other facilities also operate in the region. Ko Olina and the Makaiwa Hills development lie closest to the WGSL.

Potential Impacts and Mitigation Measures

The potential for impacts are expected to be at a localized or community level. WGSL is expected to result in potential land use impacts similar to those associated with the current use of the site. These potential impacts include:

- The generation of nuisance odors during delivery and landfilling of refuse.
- Windblown litter from the landfill becoming airborne and litter from improperly secured loads from refuse delivery trucks and private self-haulers.
- Traffic impacts associated with the transit of vehicles entering and leaving WGSL.
- The tracking of mud and sediments onto Farrington Highway from vehicles exiting the landfill.
- The migration of fugitive dust from landfill operations including earthwork and vehicles transiting to and from the site.
- The modification or loss of mauka view planes toward the WGSL.

A number of mitigation measures as described in this document have been identified to address the potential impacts described above. These measures will continue to require ongoing coordination with surrounding community and landownership interests.

Effort by the City Administration to establish an Oversight Advisory Committee for Waimānalo Gulch was initiated in July 2006. While the Oversight Advisory Committee will continue, on-going efforts by ENV and WMH will be maintained and extended to coordinate the operation of WGSL with the surrounding community. The mitigation

measures that will be implemented are described in Section 7, 7.1.56. Socioeconomic Mitigation Measures.

Historic and Archaeological Resources

An Archaeological Inventory Survey (AIS) of the proposed project site was conducted by Cultural Surveys Hawai'i (CSH) in 2007 and 2008. The purpose of the AIS was to document all historic properties within the 92.5 acre area of the proposed project known as the Area of Potential Effect (APE). The inspection of the site identified one historic property: State Inventory of Historic Properties (SIHP) # 50-80-12-6903. The site is of pre-contact origin, and consists of three large upright boulders potentially utilized as trail or boundary markers.

According to CSH the consultation effort determined no clear consensus regarding the function of the three stone uprights. However, all of the cultural consultants indicated that the stones were significant and that they were likely used by traditional Native Hawaiian cultural practitioners in the past. All cultural consultants also felt the stones should be preserved in place if at all possible because their significance and function are likely tied to their current location. If preservation in place is not an option, most were in favor of temporary relocation to Battery Arizona, with movement of the stones back to as near as possible to their original location once the landfill is closed. (CSH, 2008).

Potential Impacts and Mitigation Measures

The proposed project will require excavation, mass grading, controlled blasting, and earthwork to develop landfill cells and other structural features. The development of a modified landfill design was considered by WMH and ENV as a means of providing further protection to the stone uprights. This consideration would avoid the location of the uprights along a steep slope to maintain and preserve the condition of the existing site. However, according to WMH the uprights are located along a ridgeline that would remain susceptible to vibration.

Based on concern that construction could jeopardize the area of the site and potentially undermine the stability of the underlying surface of the stone uprights, or the uprights themselves, WMH and ENV have determined that the three upright stones comprising SIHP # 50-80-12-6903 cannot reasonably be preserved in place. Accordingly, a project effect determination of “effect with agreed upon mitigation commitments” is proposed.

Mitigation to preserve the site is recommended in the form of relocation of the three SIHP # 50-80-12-6903 upright stones to the Battery Arizona site, located in the southwestern portion of the WGSL. The proposed relocation would ensure and maintain the safety of the stones during construction activities, and make the stones more accessible to interested parties.

Based on the results of the cultural consultation, however, cultural informants would prefer to see the stones eventually returned to near their original resting places once the landfill is no longer active, with interpretive signage based on further background research and making public access available. WMH and ENV will further consider this alternative in consultation with the SHPD and community cultural informants. (CSH, 2008).

Cultural Impact Assessment

A Cultural Impact Assessment (CIA) of the proposed project site was conducted by Cultural Surveys Hawai'i (CSH) in 2007 and 2008. The purpose of the CIA is to consider the effects the proposed project may have on traditional cultural practices and resources.

In addition to previous use activities, the importation of landfill material since 1987 has most likely further eliminated any historic properties and plant resources related to Hawaiian cultural practices and beliefs that may have been present at the project site. The presence of the landfill over the last fifteen years has already precluded any traditionally established access to *mauka* areas through Waimānalo Gulch. (CSH, 2008).

The 'ili of Waimānalo has been described by community participants in the CIA as a sacred area of great cultural importance. Community participants express great concern about the Huaka'i Pō Kāne (Night Marchers). According to kūpuna, the trail of the Night Marchers in this area runs from mauka to makai. Hawaiian cultural belief is that these trails are significant and must not be impeded for fear of retribution from spirits of the departed. (CSH, 2008).

Based on the information gathered for the CIA the proposed project will affect traditional Native Hawaiian stone uprights (SIHP # 50-80-12-6903) (CSH, 2008).

Potential Impacts and Mitigation Measures

The proposed project may potentially affect cultural resources found at the planned area of lateral expansion. The following measures are designed to mitigate or reduce the potential for impacts:

1. Per Section 7.3.8. Potential Impacts and Mitigation Measures, ENV and WMH propose that the stone uprights be relocated based on the preparation of an Archaeological Monitoring Plan (AMP) with guidance from the SHPD and community informants identified by SHPD and CSH. The AMP will include a preservation plan for future cultural access.
2. Lands makai of Waimānalo Gulch have been bisected by Farrington Highway along the coastline. Although it may not be possible to completely recover this traditional mauka/makai relationship, there are three important cultural properties that can be addressed with culturally sensitive treatment: (1) cultural site SIHP # 50-80-12-6903; (2) the legend of the huaka'i pō; and (3) a series of six natural caves and rock overhangs. These features are an important part of the Hawaiian landscape and their appropriate treatment will be provided.
3. ENV and WMH will consult with community informants to mitigate or reduce the potential for visual blockage of the west and east ridgelines of the Waimānalo Gulch.

4. Six natural caves and rock overhangs in the northwestern portion of the project area were examined and documented (Dalton and Hammatt 2008). No significant cultural material was observed or discovered. Although burials were not encountered it is always possible they may be discovered. In the unlikely event of a discovery work in the immediate area will cease and the SHPD will be notified. Instructions and guidance for future steps will be obtained from the SHPD.
5. Although the land has been dramatically altered, there remains a possibility that burials and other archaeological sites may be present in and around the proposed project area. ENV and WMH will comply with the requirements for archaeological and cultural protection and preservation in Chapter 6E, HRS, and other applicable laws and regulations.
6. ENV and WMH will continue to consult with the community regarding archaeological, cultural, and other environmental matters involving the operation of the existing WGSL and the proposed lateral expansion project.

1.4. Secondary and Cumulative Impacts

The proposed WGSL Lateral Expansion project is planned to be initiated upon the exhaustion of space in the final Cell E-4 of the existing approved area of landfilling. In this regard, the potential for secondary and cumulative impacts, in many instances, can be considered similar to the impacts from use of the existing area of landfilling.

Potential secondary and cumulative impacts considered for this project include the following:

1.4.1. Potential Environmental Impacts

Climate and Rainfall

Secondary or cumulative impacts are not anticipated or expected. While the proposed scope and scale of the project are not sufficient to influence these

resources, greenhouse gases (GHG) such as methane and carbon dioxide generated from the landfill could be a potential contributing factor to global warming. An investigation of alternatives to the use of landfills in Section 9 and Appendix K, found that WGSL in combination with the use of landfill gas for the generation of electricity, and the use of the site for the disposal of H-POWER ash, are expected to contribute to fewer GHG emissions than use of the site solely as a landfill with no provision or support for the recovery of energy.

Topography, Geology and Soils

Secondary or cumulative impacts based on the continued use of WGSL are not anticipated or expected. The site has been in operation for approximately 18 to 19 years and has been subject to ongoing technical studies and evaluations by independent technical consultants for the topographic, geologic and soils resources of the site to ascertain the performance and environmental safety of the facility. During this period the technical studies that have been completed have been used to improve the capacity, capability, and safe use of the site for a landfill.

The evaluation of WGSL through the preparation of technical studies and reports will continue to be used for further improvements and modifications, as required, through the mitigative measures provided in this EIS document.

Surface Water, Groundwater, and Hydrology

Secondary or cumulative impacts to surface water, groundwater, and hydrological resources at the WGSL and region are not anticipated.

The proposed practices, procedures and mitigative measures provided in this EIS have been designed to maintain the use of the site for a landfill for a period of not less than 15 years. Long term monitoring and inspection of the site by WMH will be further provided through a EPA required post closure plan for not less than 30 years following the closure of the site. These measures, which are designed to mitigate against potential primary impacts associated with stormwater erosion and discharges of refuse and leachate to the surface water,

groundwater, and hydrologic resources of the site and the surrounding region, would serve as the principal means of avoiding the occurrence of secondary or cumulative impacts.

Natural Hazards

Potential secondary or cumulative impacts associated with floods, hurricanes, earthquakes, and tsunami have been considered in the design and operating practices applied to the site. Adverse impacts are not anticipated. Safe engineering and design standards have been incorporated in the construction of the existing area of landfilling and will be applied to the proposed area of lateral expansion. The standards applied to the site are designed to maintain a reasonable level of long term safety and reduce or prevent secondary effects due to natural hazards from floods, earthquakes, or tsunami.

Air Quality

The potential for secondary or cumulative effects from landfill gas emissions and operational use of the site involving earthwork and deliveries of refuse exists at the site without the long term use of the mitigative measures provided in this EIS document, and the operational practices that are employed by WMH. Potential long term effects can include the migration of landfill gas, dust, and nuisance odors associated with the landfill and refuse deliveries.

Mitigation to address these concerns will serve to avoid potential secondary and cumulative impacts through on-going monitoring and operational practices that maintain the existing environmental safety of the site, such that it would avoid the opportunity for other larger impacts to occur. In some cases, these measures have already been implemented: a landfill gas collection and control system has been constructed and is operating to reduce uncontrolled releases of landfill associated gases; and a waste digester at the Sand Island Wastewater Treatment Plant has been constructed and in recent months has demonstrated improved performance with fewer deliveries of odor generating sewage solids.

Acoustic Characteristics

While the potential for primary noise impacts associated with construction and operation activities are not anticipated, mitigative measures are provided in Section 5.8. Acoustic Characteristics. Potential for secondary and cumulative impacts with regard to the planned Makaiwa Hills subdivision, located next to the WGSL along its eastern boundary, are similarly not anticipated. Construction and earthwork within the landfill will be inhibited by the ridgeline separating the two properties. Mitigation to address the potential for secondary and cumulative impacts will be the same as those designed to address the primary impacts. This will include proper maintenance of all equipment with appropriate sound attenuation as required in accordance with federal, state and City & County of Honolulu regulations, the scheduling of rock crushing during normal landfill operating hours to avoid possible disturbance to surrounding neighbors, and other measures as identified in Section 5.8.

Flora and Fauna Resources

Potential for secondary or cumulative adverse impacts to flora and fauna (including invertebrate) resources at the site are not anticipated. The proposed project will be limited to the use of the City owned property. No expansion outside of the property boundary is planned or proposed. While the planned use of the site will require the removal of vegetation to establish the lateral landfill expansion area, this constitutes a short term effect of a scope and scale that is limited to the Waimanalo Gulch landfill property. In the longer term, upon completion of work the site will be restored with vegetation similar to that found on the adjoining hill sides. Whenever possible, native species will be used.

Scenic and Aesthetic Resources

The potential secondary or cumulative impact of the planned use of the site will involve modification of the surface contours within the Waimānalo Gulch, that may be considered as a continuation of the present land use, but within the lateral expansion area. This modification is a necessary part of the project to establish landfill cells, stability slopes, berms, and installation of supporting

facilities to allow for a landfill that meets the required federal, state, and City & County of Honolulu regulations for a properly designed and safe facility. While use of the site for landfilling will involve the alteration of the viewplane, mitigative measures as provided in Section 5.10.2. Potential Impacts and Mitigation Measures (Scenic and Aesthetic Environment) are proposed to reduce the impacts.

Over the long term, during the operational use of the site vegetative practices and landscaping will serve to minimize the appearance of the landfill. The site will be allowed to revegetate to match the surrounding, undeveloped hillsides once the capacity of the facility has been reached, and during the planned 30 year period of landfill maintenance and monitoring.

1.4.2. Potential Public Service Impacts

Traffic and Circulation

Potential for secondary or cumulative impacts associated with traffic and circulation are not anticipated. The proposed project will constitute a continuation of use of the site for landfilling which was started in the early 1990s. According to the traffic impact report performed for the project, the WGSL is not expected to itself generate major new transportation demands along Farrington Highway, but that the demand for use of the area roadways would most likely be from increasing development in the area. In order to maintain safe operating conditions for the users of the WGSL and the public transiting along Farrington Highway, WMH will periodically evaluate traffic to assess the need for further traffic controls to maintain public safety.

Wastewater and Potable/Drinking Water

Potential for secondary or cumulative impacts are not anticipated. The site is currently provided with adequate service for wastewater and water. No new or future demands that would exacerbate the current or long term provision of these services are anticipated.

Power and Communications

Potential for secondary or cumulative impacts are not anticipated. The proposed project is adequately served and it is anticipated that future requirements would not result in the demand for services beyond those provided by the existing utility companies.

Police, Fire, Health Care, and Emergency Services

Potential for secondary or cumulative impacts are not anticipated. The proposed project is adequately served and it is anticipated that future requirements would not result in the demand for services beyond those provided.

Education and Library Services

Potential for secondary or cumulative impacts to education or library services are not anticipated.

Parks and Recreation

The potential for secondary or cumulative impacts to parks and recreational facilities are not anticipated. The mitigative measures as provided in Section 6.10.2. Potential Impact and Mitigation Measures (Parks and Recreation), will address the migration of landfill associated odor, windblown litter migrating to area beaches and parks, and visual impacts.

Other potential secondary effects from impacts to air, water, or soils that might otherwise affect the use of parks and recreational facilities in the area will be subject to the mitigative measures as provided in Sections 5.2. Topography, 5.3. Geology, 5.4. Surface Water, 5.5. Groundwater and Hydrology, and 5.7. Air Quality.

1.4.3. Potential Socioeconomic and Related Environmental Impacts

Socioeconomic Characteristics

Potential secondary or cumulative impacts to the socioeconomic resources of the area and region are possible without implementation of the mitigative measures

provided in this EIS document, and the operational and management practices employed by WMH for the proposed project. These impacts involve potential financial losses to area businesses, and resort and residential sales from landfill associated nuisances and environmental impacts as outlined in Section 7.1.3. Community Issues and Concerns, and Section 7.1.4. Socioeconomic Impacts; and Section 7.1.5. Addendum to Socioeconomic Impacts.

If directly attributed to the landfill: (1) the immediate secondary potential impact could involve the loss of income, employment, sales, and tax revenues from the lowering of economic demand for the area; and (2) the cumulative potential impact could involve the long term loss of the capacity of the region to attract future business, residential, and other related economic growth.

The mitigative measures as provided in this EIS to address the socioeconomic resources of the area and region have been proposed to mitigate or reduce the potential for primary impacts that could lead to the potential secondary or cumulative impacts described above. These mitigation measures are provided in Section 7.1. 56. Socioeconomic Mitigation Measures, and in other sections of this EIS to maintain the environmental quality of the site and region.

Land Use and Ownership

The proposed project is anticipated to result in the potential for secondary and cumulative land use impacts similar to those associated with the current use of the site. These potential impacts would be an outgrowth of those identified in Section 7.2.3. Potential Impacts and Mitigation Measures (Land Use and Ownership), summarized as:

- The generation of nuisance odors.
- Windblown litter from the landfill becoming airborne and litter from improperly secured loads from refuse trucks and private self-haulers.
- Traffic impacts associated with the transit of vehicles entering and leaving WGSL.
- The tracking of mud and sediments onto Farrington Highway.
- The migration of fugitive dust from landfill operations.
- The modification or loss of mauka view planes toward the WGSL.

These direct impacts could potentially lead to secondary and cumulative impacts that would include the loss or impaired use of land and properties in the affected area. Mitigation to address these concerns is identified and addressed in Section 7.1.56. Socioeconomic Mitigation Measures, and in the following Sections to address the specific points above:

- 4.2.3. Environmental Controls, Litter, to address windblown litter.
- 4.4. Dust and Mud, to address tracking of mud and migration of fugitive dust.
- 5.7.3. Potential Impacts and Mitigation Measures (Air Quality), for odor control.
- 5.10.2. Potential Impacts and Mitigation Measures (Scenic and Aesthetic Environment), to address impacts to view planes toward the WGS�.

Historic and Archaeological Resources

There is potential for secondary impacts to historic and archaeological resources that may be present in the area of lateral expansion. Mitigation to address this possibility has been provided in Section 7.3.8. Potential Impacts and Mitigation Measures (Historic and Archaeological Resources), and in Section 7.4.7. Summary and Conclusions, Potential Impacts and Mitigation Measures (Cultural Impact Assessment).

Cultural Impact Assessment

Secondary and cumulative impacts associated with the use of the site involve the potential for the discovery of other cultural resources, artifacts, or burials that may be present at the project site. This potential however, was considered and served as one important reason for the completion of the Archaeological Inventory Survey (AIS) and Cultural Impact Assessment (CIA) for this project.

Mitigation to address the potential for impacts to archaeological and cultural resources will be coordinated between WMH, ENV, and the SHPD and community informants to develop an appropriate plan for treatment for the stone uprights (SIHP # 50-80-12-6903), huaka'i pō (procession of the night marchers),

and six caves and overhangs. The plan will consider the provision of access by cultural practitioners.

In the unlikely event of the discovery of a burial, work in the immediate area will cease until appropriate coordination with the SHPD has been completed. As required, the applicable provisions of law including HRS, Chapter 6E, and HAR, Chapter 13-300 (regarding burials) to maintain the protection of archaeological and cultural resources will be provided by WMH and ENV.

1.5. Consistency with Land Use Plans, Policies, and Controls

1.5.1. Hawai'i State Plan

The proposed project maintains consistency with the provisions of the State Plan in the following:

Section 226-6(b) To achieve the general economic objectives, it shall be the policy of this State to: (14) Promote and protect intangible resources in Hawaii, such as scenic beauty and the aloha spirit, which are vital to a healthy economy."

The proposed project provides for the safe and effective disposal of municipal refuse for all the communities of O'ahu. This waste, if not properly managed, could affect O'ahu's islandwide "...scenic beauty and the aloha spirit, which are vital to a healthy economy." (See Sections 4 through 6 of this document).

Section 226-11(b) To achieve the land-based, shoreline, and marine resources objectives, it shall be the policy of this State to: (1) Exercise an overall conservation ethic in the use of Hawaii's natural resources.

The proposed project is based on the use of an existing City owned facility and is an effort to conserve the limited and precious land resources of O'ahu. Conservation practices are supported through the promotion of recycling and the generation of energy through H-POWER. Future plans also call for the use of landfill gas to one day be used in the generation of electricity.

Section 226-11(b) (2) Ensure compatibility between land-based and water-based activities and natural resources and ecological systems; (3) Take into account the physical attributes of areas when planning and designing activities and facilities; (4) Manage natural resources and environs to encourage their beneficial and multiple use without generating costly or irreparable environmental damage; and (5) Consider multiple uses in watershed areas, provided such uses do not detrimentally affect water quality and recharge functions; and (6) Encourage the protection of rare or endangered plant and animal species and habitats native to Hawai'i; and (8) Pursue compatible relationships among activities, facilities, and natural resources.

Factors taken into account in the assessment of WGSL include: a relatively dry climate; the absence of drinking/potable groundwater resources that could be adversely affected by a landfill; and the absence of known threatened or endangered species. Protection against potential "costly or irreparable environmental damage", will involve the use of mitigative measures and practices as described in this EIS document.

There is limited space available for facilities such as a landfill. The subject EIS proposes mitigative measures and other practices that reflect the City and WMH's commitment for a well run facility that avoids or minimizes the potential for adverse effects.

Section 226-12 (b) To achieve the scenic, natural beauty, and historic resources objective, it shall be the policy of this State to: (1) Promote the preservation and restoration of significant natural and historic resources; (3) Promote the preservation of views and vistas to enhance the visual and aesthetic enjoyment of mountains, ocean, scenic landscapes, and other natural features; (4) Protect those special areas, structures, and elements that are an integral and functional part of Hawaii's ethnic and cultural heritage; and (5) Encourage the design of developments and activities that complement the natural beauty of the islands.

The preservation and restoration of natural and historic resources has or is currently being addressed through the conduct of special studies of flora, fauna, archaeological, and cultural resources, and through the development of mitigative measures. According to special studies, no known threatened or endangered species were observed at the site. An existing archaeological site was found in the form of three stone uprights along the southwestern edge of the landfill property. To address this discovery coordination for an appropriate treatment plan is in progress. The City intends to work with the SHPD and community to provide appropriate treatment. All required provisions of Chapter 6E,

HRS, and other provisions of law governing archaeological preservation and protection will be complied with.

View impacts involve mauka views toward the landfill property. While it is not possible to shield from view the location and features of the entirety of the WGSL, the potential for visual impacts during operation of the landfill will be minimized and mitigated with vegetative controls including the use of hydromulching, and plantings of grass, dryland shrubs, and trees, as provided in the project's landscaping plan.

Section 226-14 Objective and policies for facility systems-in general.

(a) Planning for the State's facility systems in general shall be directed towards achievement of the objective of water, transportation, waste disposal, and energy and telecommunication systems that support statewide social, economic, and physical objectives. (b) To achieve the general facility systems objective, it shall be the policy of this State to: (1) Accommodate the needs of Hawaii's people through coordination of facility systems and capital improvement priorities in consonance with state and county plans.

The proposed project represents a major capital project necessary for the disposal of municipal solid waste and refuse on O'ahu. The project will serve all of O'ahu's residents and visitors and is an essential part of the City's refuse management system.

Section 226-14 (b)(2) Encourage flexibility in the design and development of facility systems to promote prudent use of resources and accommodate changing public demands and priorities.

The proposed project will allow flexibility in the development and adoption of future City initiatives that will reduce dependency on landfills: (1) The future adoption of new technologies will require sufficient time for operational viability; (2) There are no existing refuse technologies that do not themselves result in the generation of some refuse that cannot be further recovered, recycled, or otherwise reused. For these forms of waste, a landfill is the most viable method of disposal; (3) Any effort to reduce the volume of refuse being landfilled would benefit O'ahu through an extension of the life of the landfill. Landfill capacity that is not used would forestall the need to seek a new landfill location; (4) The landfill serves as a public resource in the event of a natural disaster such as a

hurricane, earthquake or tsunami. A location for the disposal of cleanup and demolition debris would be required to meet public health and safety requirements during recovery.

Section 226-14 (b)(3) Ensure that required facility systems can be supported within resource capacities and at reasonable cost to the user.

The proposed project represents the effort to expand an existing public facility that is owned by the City & County of Honolulu. The expansion will be supported within the existing resource capacity of the site and at reasonable taxpayer cost.

Section 226-15 Objectives and policies for facility systems-solid and liquid wastes. (a) Planning for the State's facility systems with regard to solid and liquid wastes shall be directed towards the achievement of the following objectives: (1) Maintenance of basic public health and sanitation standards relating to treatment and disposal of solid and liquid wastes. (b) To achieve solid and liquid waste objectives, it shall be the policy of this State to: (2) Promote re-use and recycling to reduce solid and liquid wastes and employ a conservation ethic, and (3) Promote research to develop more efficient and economical treatment and disposal of solid and liquid wastes.

The proposed project will facilitate the maintenance of public health and sanitation standards with regard to the disposal of MSW and refuse. Although the proposed project does not in itself involve recycling, the City, through its Solid Waste Integrated Management Plan identifies recycling and materials recovery efforts to reduce O'ahu's overall dependency on the need for landfills.

The City has promoted the investigation and adoption of technology based methods that have proven to be efficient and economic in the reduction and treatment of solid waste. Examples include a solids digester facility and recent efforts to upgrade H-POWER.

Section 226-104 (b) Priority guidelines for regional growth distribution and land resource utilization: (2) Make available marginal or non-essential agricultural lands for appropriate urban uses while maintaining agricultural lands of importance in the agricultural district.

The proposed project involves the use of agricultural land that has not been classified by the Agricultural Lands of Importance to the State of Hawai'i (ALISH) system. The

non-essential agricultural nature of the land can be considered as a use that would allow for the maintenance of other, more important agricultural lands.

Section 226-104 (b)(9) Direct future urban development away from critical environmental areas or impose mitigating measures so that negative impacts on the environment would be minimized; (12) Utilize Hawai'i's limited land resources wisely, providing adequate land to accommodate projected population and economic growth needs while ensuring the protection of the environment and the availability of the shoreline, conservation lands, and other limited resources for future generations; and (13) Protect and enhance Hawaii's shoreline, open spaces, and scenic resources.

The proposed project has been evaluated with regard to the potential for adverse effects to critical environmental features or habitat. There are no known threatened or endangered species present and as appropriate, mitigative measures are proposed to minimize, mitigate, or otherwise reduce the potential for adverse environmental impacts.

The WGS� has the potential to continue to support O'ahu's refuse disposal requirements for the next approximately 15 years. This use would support and preempt the use of other locations until such time that the present site has reached capacity.

As noted, this EIS document identifies the appropriate application of mitigative measures and practices to avoid the potential for adverse environmental impacts as a result of development for the area of lateral expansion.

1.5.2. State Functional Plans

The proposed project is considered to be relevant and consistent with the State Energy and Recreation Functional Plans.

1.5.3. State Land Use Law

The proposed project is located within the State Agricultural District. Because the project is in the State Agricultural District, a State Special Use Permit or State Land Use District Boundary Amendment must be obtained for the proposed expansion.

1.5.4. Special Management Area

According to the City SMA Boundary Map for the Ewa area, the proposed project site is located outside of the SMA and is therefore not subject to SMA regulation.

1.5.5. Coastal Zone Management Program

The following is an assessment of the project with respect to the CZMP objectives and policies set forth in HRS Section 205(A)-2.

1. Recreational resources

The proposed facility is not located on the coastline or shoreline and does not involve the use of coastal resources. The site is not in a location suitable for the development of new shoreline recreational opportunities or to dedicable shoreline areas with recreational value. However, with the eventual reclamation of the site, future recreational park opportunities may one day become available.

2. Historic resources

Archaeological investigation of the site has resulted in the discovery of three stone uprights in early 2007. To address the uprights: (1) the SHPD was notified to ascertain further actions or requirements to ensure no disturbance; and (2) notification and coordination with appropriate parties as determined by SHPD that includes the Office of Hawaiian Affairs (OHA) and SHPD-designated cultural informants from the area. The process of coordination to develop an appropriate treatment plan to preserve the uprights is in progress.

3. Scenic and open space resources

The majority of the proposed project will not be visible from most vantage points along the Farrington Highway in the Wai'anae or Kahe Point directions. The existing Kahe Point ridge line provides screening of views of the landfill, including the proposed expansion area.

The general area that fronts Waimānalo Gulch from the Kai Lani subdivision to Ko Olina Beach Club will be the most potentially impacted. Mitigation to reduce visual impacts has been initially implemented and will be modified for the proposed project. The existing site has a 400-foot-wide vegetative buffer strip along the eastern portion of the site with a north-south separation of 800 to 1,000 feet. The existing landfill has been hydromulched to begin the growth of grasses. The landscaping effort, once established, will resemble vegetation on adjoining hillsides. In time, plant species in the surrounding areas are expected to spread into the closed areas of the landfill through natural seeding.

4. Coastal ecosystems

The proposed project is not expected to have any adverse effects on coastal or marine coastal ecosystems. The location of the project is mauka of the shoreline and the Farrington Highway.

5. Economic uses

Although the proposed project is not a coastal dependent facility, the location of the project site was based on selection criteria and governmental regulations that establish the suitability of the site for use as a landfill. This land use is not expected to affect the location or expansion of future coastal dependent developments.

6. Coastal hazards

The potential for hazards from storm wave, tsunami, hurricane, wind, flood erosion, subsidence, and point and nonpoint source pollution are addressed through adherence to the landfill site operating manual and all required regulatory permits. Coastal flooding is not anticipated based on the location of the project inland and upgradient of the Farrington Highway.

7. Managing development

WGSL is in the State Agricultural District. The zoning is AG-2, General Agricultural. Land uses are subject to regulation by the State and City. All improvement activities will comply with State and City & County of Honolulu environmental rules and regulations.

8. Public participation

Public involvement will consist of public notification of the project as provided in the Office of Environmental Quality Control (OEQC) Bulletin. See Section 13, Organizations, Agencies, and Public Parties Consulted in the Environmental Impact Statement Process. All written public comments to ~~this~~ the DEIS will be provided with a written response and as appropriate, mitigation measures will be developed to address issues and concerns. As needed, additional information has been provided in this FEIS to address concerns and issues raised.

9. Beach protection

The proposed project is not located along the shoreline or beach. No structures are proposed seaward of the shoreline. Control of erosion will be based on conformance to standards of the City regulating the control of erosion.

10. Marine resources

The proposed project does not involve or utilize marine resources.

1.5.6. City & County of Honolulu General Plan

The proposed project is consistent with the following General Plan objectives and policies:

"I. Population

Objective B: To plan for future population growth; Policy 1: Allocate efficiently the money and resources of the City and County in order to meet the needs of Oahu's anticipated future population; and Policy 2: Provide adequate support facilities to accommodate future growth in the number of visitors to Oahu."

Although the proposed project does not directly influence future population growth, it represents an important public facility serving the island of O‘ahu by providing a location and means for the disposal of municipal refuse. In this regard the project is a necessary use of resources to meet future population needs and growth in the number of visitors.

"III. Natural Environment

Objective A: To protect and preserve the natural environment; Policy 1: Protect Oahu's natural environment, especially the shoreline, valleys, and ridges, from incompatible development; Policy 2: Seek the restoration of environmentally damaged areas and natural resources; and Policy 4: Require development projects to give due consideration to natural features such as slope, flood and erosion hazards, water- recharge areas, distinctive land forms, and existing vegetation."

The proposed project will require an expansion of use and require transformation of the existing site into space that will be used for landfilling. With the eventual closure of the site, the land is expected to be reclaimed for other purposes that may be considered more compatible with the area surroundings, such as park space that will constitute a public purpose and benefit.

"V. Transportation & Utilities

Objective B: To meet the needs of the people of Oahu for an adequate supply of water and for environmentally sound systems of waste disposal; Policy 3: Encourage the development of new technology which will reduce the cost of providing water and the cost of waste disposal; Policy 4: Encourage a lowering of the per-capita consumption of water and the per-capita production of waste; Policy 5: Provide safe, efficient, and environmentally sensitive waste-collection and waste-disposal services; Policy 6: Support programs to recover resources from solid-waste and recycle wastewater; and Policy 7: Require the safe disposal of hazardous waste."

The proposed project is designed to serve as an environmentally sound method for the disposal of municipal solid waste and ash. New technology based solutions will continue to be evaluated by the City. At this time however, there are no new technologies with proven feasibility of performance or that would completely eliminate the generation of waste by-products that would require disposal (see **Appendix K**).

The recovery of resources from solid waste is already occurring through the recycling of waste materials into energy through the City's H-POWER facility. Plans for the expansion of the H-POWER have been proposed by the City. It is possible in the future that as new and emerging technologies demonstrate feasibility of application for the City that such technologies will be adopted. At this time, however, there are no alternatives that could by itself address the need for landfilling.

The WGSL does not accept hazardous waste.

"VIII. Public Safety

Objective B: To protect the people of Oahu and their property against natural disasters and other emergencies, traffic and fire hazards, and unsafe conditions. Policy 2: Require all developments in areas subject to floods and tsunamis to be located and constructed in a manner that will not create any health or safety hazard; and Policy 8: Provide adequate search and rescue and disaster response services."

In the event of a public emergency involving hurricane, tsunami, or earthquake, WGSL will serve as a repository for disaster debris. This use will promote public safety through the disposal of debris that could otherwise accumulate in populated areas.

1.5.7. City & County of Honolulu 'Ewa Development Plan
(‘Ewa Sustainable Communities Plan)

The proposed project will be evaluated for consistency with the updated 'Ewa Development Plan (DP), as appropriate, during the preparation of the project EIS, and upon completion of the "Ewa DP five-year review. The project site is depicted on the 'Ewa DP within the Preservation District on the plan's illustrative Open Space and Phasing Maps. The 'Ewa DP discusses the analysis and recommendations of the Solid Waste Integrated Management (SWIM) Plan, prepared by the Department of Public Works and last adopted by the Honolulu City Council in 1995. The Ewa DP states that the SWIM Plan identified the Waimānalo Gulch as having potential for expansion; however, siting and/or expansion of sanitary landfills should be analyzed and approved

based on islandwide studies and siting evaluations (such as the Chapter 343, HRS, EIS process which is the subject of this document).

The Development Plan Public Facilities Map also depicts a symbol for the existing landfill facility, but does not delineate the boundaries of the landfill.

1.5.8. City & County of Honolulu Zoning Law

The project site is zoned AG-2 General Agricultural District. According to the Land Use Ordinance, the landfill is a "public use" and is permitted in the AG-2 General Agricultural District.

1.6. Unresolved Issues

1.6.1. Preservation of Stone Uprights

The final disposition of the three stone uprights discovered at WGSL are in the process of review and coordination with the SHPD, Office of Hawaiian Affairs, and SHPD's designated cultural informants to identify and define an appropriate course of preservation.

The location of the stone uprights has the potential to affect the planned construction of the site depending on the need for site adjustments to accommodate the area containing the uprights. This effect is expected to be known only after the SHPD decision regarding the preservation plan for the uprights. As applicable, this decision will be factored into the final design and engineering, and construction drawings that will be prepared for the proposed project.

1.6.2. Final Engineering Construction Details

The detailed final landfill phasing and engineering plans will be prepared by WMH. Although the final phasing plans are not yet complete, the area of use for active landfill cells is approximately ~37 acres, within the planned 92.5 acres of lateral expansion. The

remaining areas of the 92.5 acre not planned for landfill cells will be used for stockpiling of landfill cover material, utilities including access roadways and drainage controls, landscaping, and related landfill associated purposes.

1.6.3 Release of Crushed Rock from the Site

The proposed project will result in the generation of recovered soil, cobbles and boulders from excavation and grading of the site. Material that is suitable use as cover material will be stockpiled and used for landfill cover. A decision regarding the release or possible sale of any excess material has not yet been determined. The City & County of Honolulu, however, retains the ownership rights to any excavated materials. Since August 1, 1991, the City has received royalties for any excavated and processed material removed from the WGSL.

1.6.4. EPA Notice of Violation (NOV)

Because the EPA's NOV is currently under discussion amongst the EPA, the City and Waste Management, no final determination as to the alleged violations has been made. There is no relationship between the EPA NOV and the City's sewer systems.

1.6.5. Elevated Temperatures

Landfill gas temperatures at the WGSL exceed the EPA specified maximum temperature due to atypical chemical and biological processes that are unique to the site. WMH has shown that the elevated temperatures have not caused a fire. Notification of the operating characteristics of the WGSL have been reported to the EPA to ensure sufficient monitoring and operating standards are carried out to maintain safety and security of the site, and to propose the granting of an alternate operating standard. WMH is currently awaiting a response from the EPA and will coordinate appropriate measures to maintain compliance with all regulations as required by law.

1.6.6. Appeals of Decisions to Extend SUP to November 1, 2009

Colleen Hanabusa and the Ko Olina Community Association (KOCA) filed two appeals challenging the Planning Commission's and the Land Use Commission's approvals of an amendment to the SUP to extend the deadline for waste acceptance at WGSL. The appeals were consolidated on June 25, 2008. Oral argument was heard on October 1, 2008, and the Circuit Court dismissed the appeal challenging the Planning Commission's decision and affirmed the LUC's decision. (See Section 11.6. Appeals of Decisions to Extend SUP, for detail).

1.7. Summary of EISPN Comments and Responses

A table summarizing the written comments received from the EISPN, the responses prepared, and the DEIS sections referencing the responses, as appropriate, is provided in Table 1-42, Summary of Draft EIS Comments and Responses to the WGSL EISPN.

1.8. Summary of DEIS Comments and Responses

A table summarizing the written comments received from the DEIS, the responses prepared, and the FEIS sections referencing the responses, as appropriate, is provided in Table 1-3, Summary of Final EIS Comments and Responses to the WGSL DEIS.

Table 1-2
Summary of Draft EIS Comments and
Responses to the WGSL EISPN

**Table 1-42: Summary of Draft EIS Comments and Responses to the
Waimanalo Gulch Sanitary Landfill Expansion Environmental Impact Statement Preparation Notice (EISPN)**

Note: *See Section 15. Comments and Responses to the EISPN for the comment and response letters.

Commenting Party/Itemized Comments	Date of Letter	DEIS Section Reference and Comments*
1. Boisse P. Correa, Chief of Police Honolulu Police Department City & County of Honolulu	11/28/2006	
1.1 This project should have no unanticipated impact on the facilities or operations of the Honolulu Police Department.		See response letter. <u>Section 6.5. Police Protection</u> . The proposed project should have no unanticipated impact on the Police Department.
2. Lester K. C. Chang, Director Department of Parks and Recreation City & County of Honolulu	11/30/2007	
2.1 The Department of Parks and Recreation has no comment and as the proposed expansion will have no impact on any program or facility of this department, you are invited to remove us as a consulted party to the balance of the EIS process.		See response letter. <u>Section 6.10. Parks and Recreation</u> . The proposed project will have no impact on any program or facility of DPR. DPR has requested to be removed as a consulted party to the EIS process.
3. Denis R. Lau, P.E., Chief Department of Health - Clean Water Branch State of Hawaii	11/30/2007	
3.1 The Draft Environmental Impact Statement should address the impacts to state waters and controlling pollutants in storm water runoff in accordance with Hawaii Administrative Rules (HAR), Chapters 11-54, 11-55 and 11-58.1.		See response letter. <u>Section 4.6. Stormwater Management, Section 5.4. Surface Water</u> , describes the measures to address compliance with HAR 11-54, 11-55, and 11-58.1.
3.2 Construction activities related to the expansion requires National Pollutant Discharge Elimination System (NPDES) general permit coverage for storm water associated with construction activity. A Notice of Intent (NOI) form for NPDES general permit coverage should be submitted at least 30 days before the commencement of construction activities.		See response letter. <u>Section 12. Permits and Regulatory Approvals That May be Required</u> . A permit application for the NOI Form C, Construction Stormwater permit application will be prepared and filed.
3.3 Any other discharge from the project, including, but not limited to, treated effluent from leaking underground storage tank remedial activities, hydrotesting water, and construction dewatering effluent, requires separate NPDES general permit coverages. Please see Item 2 above for information regarding the submittal of NOI.		<u>Section 12. Permits and Regulatory Approvals That May be Required</u> . Construction activities for the proposed project that generate storm and non-stormwater discharges to state waters will be subject to the NPDES regulations. Should the proposed project be approved, the appropriate NPDES permit applications will be prepared and filed for the area of expansion. A list of the permit applications that may be required will be provided in the DEIS.
3.4 The existing portion of the facility currently has coverage under the NPDES general permit for discharges of storm water associated with industrial activity. This coverage expires on November 6, 2007, and a renewal NOI must be submitted before the expiration date. A reminder will be sent to you next year. When the expansion project is completed, the Storm Water Pollution Control Plan for the facility must be revised to address the expanded area and submitted to our office.		<u>Section 12. Permits and Regulatory Approvals That May be Required</u> . The NPDES NOI Form B permit application will be filed and will contain the project's revised Storm Water Pollution Control Plan for the proposed area of expansion.
3.5 In accordance with HAR, Section 11-55-38, the applicant for an NPDES permit is required to either submit a copy of the new NOT or NPDES permit application to the State Department of Land and Natural Resources, State Historic Preservation Division (SHPD), or demonstrate to the satisfaction of the DOH that the project, activity, or site covered by the NOT or application has been or is being reviewed by SHPD. If applicable, please submit a copy of the request for review by SHPD or SHPD's determination letter for the project.		See response letter. "Information concerning compliance with SHPD regulatory requirements will be provided in the DEIS. Documents that will be submitted to the SHPD for review will include an archaeological study of the planned area of expansion, and copies of the NPDES permit applications, as applicable." <u>Section 12. Permits and Regulatory Approvals That May be Required</u> , and <u>Section 7.3. Historic and Archaeological Resources</u> , provides information concerning compliance with SHPD regulatory requirements and includes an archaeological study of the planned area of expansion.
3.6 Any discharges related to project construction or operation activities, with or without a Section 401 Water Quality Certification or NPDES permit coverage, shall comply with the applicable State Water Quality Standards as specified in HAR, Chapter 11-54.		See response letter. <u>Section 12. Permits and Regulatory Approvals That May be Required</u> . The requirement that all project construction activities must comply with HAR, Chapter 11-54, Water Quality Standards, is noted and will be complied with should the proposed project be approved.

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3.6 The Hawaii Revised Statutes, Subsection 342D-50(a), requires that "[No] person, including any public body, shall discharge any water pollutants into state waters, or cause or allow any water pollutant to enter state waters except in compliance with this chapter, rules adopted pursuant to this Chapter, or a permit or variance issued by the director."		See response letter. <u>Section 12. Permits and Regulatory Approvals That May be Required.</u> The City and its operator, Waste Management of Hawaii, will comply with the requirements the subject section.
4. Patricia Hamamoto, Superintendent Department of Education, State of Hawaii	12/8/2006	
4.1 No comment at this time.		NA
5. S. B. Teramoto, Board Vice President AOAO at The Coconut Plantation	12/11/2006	
5.1 The Waimanalo Gulch Landfill continues to adversely impact the surrounding areas of Ko Olina with odors, dust and a constant stream of trucks. The Association of Apartment Owners at The Coconut Plantation, whom I am representing, are very concerned with the open issues of garbage still being piled higher than a permit allows and the level of leachate - liquid seepage from garbage is not totally monitored. We have seen flying trash and plastic bags that litter the roadways, parks, nearby residences and eventually polluting our ocean.		See response letter. The height of the existing landfill was coordinated with the State Department of Health (DOH) through a request for a height modification submitted in February 2006. On February 20, 2008, the DOH approved the height modification request based on thorough stability analyses. Leachate generated from the operation of the existing area of landfill is currently being monitored in accordance with DOH requirements. Litter management practices for the proposed site are provided in <u>Section 4.2.3. Environmental Controls, Litter.</u>
5.2 This landfill has reached its safe limit for its size and proximity to the ocean. It has previously been determined that the area between the gulch and the waterfront can only handle the load point that is now being reached.		See response letter. <u>Section 4. Project Description; Section 5.2. Topography; Section 5.3. Geology; Section 5.4. Surface Water, and Section 5.5. Groundwater and Hydrology,</u> discuss the ability of the site to support the planned lateral expansion of the landfill and includes a description of the proposed area of use and its capacity.
5.3 Another concern is the run-off of storm water that comes from the landfill. This run-off is detrimental to our reefs, which are of great importance to the tourism business, here on the Leeward Coast. The artificial reef created by the warm water discharge pipe at the power station is the best snorkeling on the Leeward Coast of the Island and the life blood for numerous charter operations for both Ko Olina Marina and Waianae Harbor. All around this small section (about 500 yards to the right of the gulch), the reefs are dying as the coral heads and fish are smothered by the mud and contaminants that are allowed to flow into our ocean. To expand the landfill beyond current limits is guaranteed to adversely effect the ocean environment here for decades. ...It is imperative to have the environmental study incorporate how compliance enforcement is to be adhered to. So far it appears we have been failed by the watch dog organizations. It is our position that the Waimanalo Landfill be closed		See response letter. <u>Section 4. Project Description; Section 4.6. Stormwater Management.</u> Describes the stormwater management controls of the existing and planned lateral landfill expansion. This includes a discussion of the potential for impacts to nearshore waters as well as mitigative measures, as appropriate, to ensure protection of the ocean coastal resources. <u>Section 5.10. Scenic and Aesthetic Environment</u> addresses mitigation for visual impacts. <u>Section 5.7. Air Quality</u> addresses mitigation of landfill associated odors. <u>Section 4.2.3. Environmental Controls, Litter,</u> addresses windblown litter control. <u>Section 4.4. Dust and Mud</u> addresses dust control.
6. Orlando "Dan" Davidson, Executive Director Hawaii Housing Finance and Development Corporation State of Hawaii	12/12/2006	
6.1 We have no housing-related comments to offer.		NA
7. Eugene C. Lee, P.E., Director Dept. of Design and Construction City & County of Honolulu	12/12/2006	
7.1 Department has no comments to offer at this time.		NA
8. Steve Kelly, Manager - Entitlements & Infrastructure Makaiwa Hills, LLC	12/13/2006	

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8.1 Makaiwa Hills LLC ("MH LLC") is the fee owner of approximately 1,700 acres of property ("Property") located on the eastern boundary of the Waimanalo Gulch Landfill ("Waimanalo Gulch"). As part of the Environmental Impact Statement ("EIS") Public Scoping process, MH LLC submitted a letter dated August 29, 2006, which outlined concerns regarding blasting activity that had been occurring near the western portion of the Property. MH LLC expressed concern that the aforementioned blasting activity, as well as any future activity could threaten the Property's structural integrity.		See response letter. <u>Section 5.8. Acoustic Characteristics</u> . Controlled blasting is discussed and appropriate controls are described to prevent against the potential for adverse impacts. <u>Section 4. Project Description</u> and <u>Section 5.3. Geology</u> . The potential for geologic structural and related potential impacts and planned mitigation measures are discussed.
8.2 Structural integrity of the slope along Waimānalo Gulch's eastern boundary line.		See response letter. <u>Section 4.1. Construction Activities</u> , <u>Section 5.3. Geology</u> . The specific locations and details associated with some of the items will not be fully known or finalized at the time the EIS is processed. The intention of ENV and WMH is to closely coordinate the work activities required to mitigate and minimize any potential for impacts. As much as possible, the DEIS will describe the structural integrity of the site, operational practices, and other practices that will be used to ensure a well run and operated facility.
8.3 Proposed operations near Waimānalo Gulch's eastern boundary line.		See response to Item 8.2.
8.4 Proposed access points for any expansion of Waimanalo Gulch near the eastern boundary.		See response to Item 8.2.
8.5 The eventual height of Waimānalo Gulch along its eastern boundary.		See response to Item 8.2.
8.6 The distance from the top of slope to the Waimanalo Gulch eastern property line.		See response to Item 8.2.
8.7 Blast distances from Waimanalo Gulch's eastern property line.		See response to Item 8.2.
9. Deborah Kim Morikawa, Director Department of Community Services City & County of Honolulu	12/14/2006	
9.1 The subject project will have no impact on the projects and programs of the Department of Community Services.		NA
9.2 However, we believe it is worth noting in the Draft and Final EIS that the City and County of Honolulu will be allocating a \$2 million community benefits package to offset the impact of the Waimanalo Gulch landfill. The intent is that \$1 million will go to the Department of Parks and Recreation for parks improvements to the areas most directly affected by the landfill. The rest of the money will be used by the Department of Community Services to provide grants and services that will address problems or concerns identified by residents.		See response letter. <u>Section 7.1.3.2. Community Issues and Concerns Regarding WGSL</u> . The City has allocated a \$2 million community benefits package in fiscal year (FY) 2007 to communities in the vicinity of the Waimanalo Gulch landfill. The Administration proposes additional funding to continue the community benefits program to Leeward Communities in the next FY.
10. Genevieve Salmonson, Director Office of Environmental Quality Control State of Hawaii	12/15/2006	
10.1 Notice of the Nānākuli EISPN was published in our May 23rd, 2006 Environmental Notice. In the draft EIS fully discuss the relation between the currently proposed expansion of Waimānalo Gulch and Nanakuli B.		See response letter. <u>Section 9.6. Alternative Sites for a Municipal Landfill</u> . Nānākuli B landfill is considered an alternative to the proposed project but is not considered viable by the ENV.
10.2 In February 2006 the State DOH issued a Notice and Finding of Violation and Order against Waste Management of Hawaii and the City & County of Honolulu for 18 alleged violations of solid waste management laws, regulations, and permit conditions at Waimanalo Gulch Landfill. When and how will these alleged violations be corrected? What assurance does the public have that these alleged violations will not occur in the expansion area?		<u>Section 2.3. Environmental Compliance Violations, 2.3.1. State Department of Health</u> . On December 7, 2007, DOH, the City and Waste Management of Hawaii, Inc., agreed to a settlement which resolved the NVO. At that time, there was only a single remaining violation that had not been resolved--the exceedance of permitted grades. On February 20, 2008, DOH issued a grade modification approval which resolved the grade exceedance issue. All alleged violations in the NVO have been resolved.
10.3 A list of acronyms and abbreviations used in the text would be helpful for the reviewer. Please include such a list in the draft EIS.		See response letter. <u>Table of Contents</u> . A list of acronyms is included in the EIS document.

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10.4 A list of agencies and community groups to be consulted during the EIS process was not included in the EISPN. Include this list in the EIS.		See response letter. <u>Section 13. Organizations, Agencies, and Public Parties Consulted in the Environmental Impact Statement Process</u> , provides this list.
10.5 In the DEIS permits list (or chart) be sure indicate the status of each.		See response letter. <u>Section 12. Permits and Regulatory Approvals That May be Required</u> . The DEIS includes the status of the permits and approval that may be required.
10.6 The text accompanying this figure indicates that the Kahe power plant lies to the east of the landfill, while in the figure it lies to the west. Please correct this in the draft EIS.		See response letter. <u>Section 4.1.1. Project Location, Section 7.2.1. Regional Land Uses, Section 7.2.2. Properties within Proximity to the Proposed Project</u> . The location of the HECO power plant is west of the WGSL and is acknowledged.
11. Keith S. Shide, Principal Executive Board of Water Supply City & County of Honolulu	12/18/2006	
11.1 We have no objections to the proposed project.		NA
12. Kenneth G. Silva, Fire Chief Honolulu Fire Department City & County of Honolulu	12/19/2006	
12.1 The Honolulu Fire Department has no additional comments. Please refer to our letter dated June 29, 2001, to acting Director, Timothy E. Steinberger.		See response letter. <u>Section 6.6. Fire Protection</u> . The 6/29/01 letter references the provision of fire apparatus access. Fire apparatus access will be provided for the project duration. Waste Management of Hawaii, will notify the Fire Department if there be any issues with maintaining access.
13. James Hodge Hawaiian Waste Systems, LLC	12/20/2006	
13.1 Identification of appropriate waste; acceptable versus unacceptable waste: Because Roosevelt Landfill is a RCRA Subtitle D facility, it does not accept any hazardous or "dangerous" wastes as defined by the Resource Conservation and Recovery Act. Thus, multiple layers of protection against the inclusion of hazardous waste in Hawaiian waste bales will be in effect in HWS' process... HWS' screening process will be reviewed and regulated by the State of Hawaii Department of Health, USDA and the Klickitat County Health Department, all subject to US EPA Subtitle D regulations.		See response letter.
13.2 Locations for staging, handling and processing of waste for subsequent shipment/export: Oahu has a number of suitable locations for waste processing facilities that could be easily developed... HWS has identified a location for waste transshipment and is currently proceeding with its development.		See response letter.
13.3 The range of (financial) costs associated with transshipment: It is estimated that the cost of transshipment will be dramatically less than other "new technology" alternatives that have been examined by the City of Honolulu, and competitive (considering relative capital investment) with traditional alternatives such as new landfills or incinerators."		See response letter.
13.4 Potential environmental costs for the City and County of Honolulu: Waste transshipment will have a positive environmental impact on essential sanitary services in the City and County of Honolulu. The City and County has tried unsuccessfully to site new landfills or secure alternative technologies. Waimanalo Gulch Sanitary Landfill is no longer located in an optimal area due to urban infill. Because of these issues, Honolulu is in desperate need of disposal alternatives. HWS' export system presents an alternative that is environmentally secure over a short or long-term period...		See response letter.
13.5 Potential environmental costs for the mainland U.S. facility receiving the waste: Roosevelt Landfill was designed and engineered to be one of the world's most environmentally secure landfills... Allied Waste, the second largest solid waste company in the United States and owner/operator of Roosevelt Landfill, provides complete indemnification to its solid waste customers by taking title to all solid waste entering the facility.		See response letter. The engineering and operating standards of the Roosevelt Landfill, approximately 2,500 miles or more from Honolulu, are acknowledged.

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13.6 Transshipment leading to Oahu 's dependency on resources out of its control: Waste export has become such an integral part of solid waste management in the United States that Hawaii is now the only US state that does not export or import any waste... We encourage the EIS process to review the prevalence and commonality of regional landfilling throughout the mainland US.		See reponse letter.
13.7 The receiving state will assume the long term environmental management issues and problems associated with accepting Oahu's refuse: Klickitat County, host municipality of the Roosevelt Landfill, conceived of and developed the facility via a public procurement process as an economic development initiative... The Klickitat County Commissioners have been kept apprised of HWS' export project in Honolulu, and have sent letters to officials in Hawaii supporting the concept and inviting them to visit Roosevelt... Roosevelt Landfill's capacity - permitted for 5 million tons annually and 220 million tons overall, with room for expansion - is such that waste from Honolulu would not significantly impact its ability to meet current and future domestic waste disposal needs.		See reponse letter.
14. Clyde W. Nāmu'o, Administrator Office of Hawaiian Affairs State of Hawaii	12/21/2006	
14.1 Although we appreciate that an Environmental Impact Statement (EIS) is being prepared for this project, we point out that the purpose of Hawaii's EIS law is not to justify the environmental effects of government actions after economic and technical decisions have been made. Rather, the purpose is to "ensure that environmental concerns are given appropriate consideration in decision making along with economic and technical consideration." HAR § 11-200-1. In line with this purpose is the requirement that "the agency shall assess at the earliest practicable time the significance of potential impacts of its actions, including the overall, cumulative impact in light of related actions in the region and further actions contemplated." HAR § 11-200-5.		See response letter. This comment is acknowledged.
14.2 This EISPN appears to address the isolated issue of expanding a landfill, and not the comprehensive issue of sustainable waste management on O'ahu... Without guidance of a comprehensive waste management plan for the island, the cumulative impacts of a single landfill cannot be analyzed.		See response letter. <u>Section 1. Executive Summary</u> , indicates the EIS is being developed in conjunction with the preparation of the Solid Waste Integrated Management (SWIM) Plan. While the SWIM Plan will provide the policy guidance and direction for the future handling of Oahu's solid waste through a number of projects and facilities that include Waimanalo Gulch. Cumulative Impacts are also discussed.
14.3 ... it appears that this EIS is being prepared merely to discuss and possibly mitigate environmental effects, rather than to serve as an "informational document" to guide the County's decision-making...this use of the EIS process misses the point of the EIS law to encourage discussion of environmental issues before important decisions are made...the County must comprehensively analyze innovative and environmentally friendly waste disposal methods that are appropriate for our island state.		See response letter. <u>Section 9. Alternatives to the Proposed Action, Section 7.1.5.3. Improving the Commitment to Alternative Solutions to Landfilling</u> . ENV has been actively involved in the exploration of alternative methods and technologies to waste reduction and disposal and will continue to do so.

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<p>14.4 We request that the forthcoming EIS include a detailed analysis of the reasons behind the current SUP condition to close the landfill by 2008. We also request that the EIS clearly state the changed circumstances or other reasons that prevent the applicant from honoring its commitment to close Waimanalo Gulch Landfill. The EISPN at page 1-3 notes that the Mayor's Advisory Committee, which was formed in December 2003 to recommend different landfill sites, chose to consider Waimanalo Gulch, which was then ranked the highest among the choices. Please discuss the ranking criteria used, as well as the why Waimanalo Gulch was still considered, despite the goal of the Committee to recommend a different site. Please also discuss what good faith efforts were made to find other suitable landfill sites, and how the applicant attempted to comply with the LUC's purpose and intent behind conditioning the SUP on closure by 2008.</p>		<p>See response letter. <u>Section 2. Project Background.</u> Describes the events, including the SUP, and the current status of the WGSL closure date. <u>2.2.2. Council Resolution 04-348, CD1, FD1, Selecting a Site for a New City Landfill.</u> Describes further detail re selection of Waimanalo Gulch despite the goal of the Mayors Advisory Cmte. on Landfill Site Selection to select another site. <u>Section 9. Alternatives to the Proposed Action.</u> Describes the work of the Committee. <u>Section 7.1.5.3. Improving the Commitment to Alternative Solutions to Landfilling.</u> Documents prior activities by ENV to consider alternatives to landfilling.</p>
<p>14.5 We also request that the EIS address the various health concerns that have been raised by the Department of Health, and how these problems will be addressed and prevented in the future. In addition, please provide detailed analysis of how impacts to the surrounding community will be mitigated, including proposed benefits packages.</p>		<p>See response letter. <u>Section 2.3. Environmental Compliance Violations, 2.3.1. State Department of Health</u> provides info. on the DOH Notice of Violation and Order which occurred after it had been self-reported by Waste Management of Hawaii, Inc. The great majority of the alleged violations were addressed before the NVO was issued. On December 7, 2007, DOH, the City and Waste Management of Hawaii, Inc., agreed to a settlement which resolved the NVO. At that time, there was only a single remaining violation that had not been resolved—the exceedance of permitted grades. On February 20, 2008, DOH issued a grade modification approval which resolved the grade exceedance issue. All alleged violations (environmental and health concerns) in the NVO have been resolved.</p>
<p>15. Laverne Higa, P.E., Director and Chief Engineer Department of Facility Maintenance City & County of Honolulu</p>	<p>12/22/2006</p>	
<p>15.1 No comments to offer at this time. Expansion of the landfill will have negligible impact on our facilities and operations.</p>		<p>NA</p>
<p>16. Rida Cabanilla, State Representative House of Representatives State of Hawaii</p>	<p>12/22/2006</p>	<p>See response letter. The EISPN, Section 1, Project Background, identifies the option of closing WGSL as not now available to the City. <u>Section 9. Alternatives to the Proposed Action,</u> identifies alternatives to the continued long-term use of the landfill investigated by the City. <u>Section 7.1.5.3. Improving the Commitment to Alternative Solutions to Landfilling,</u> identifies prior efforts by the City to promote alternative technology and waste reduction.</p>
<p>17. Ralph F. Harris, President Ko Olina Fairways - Association of Apartment Owners</p>	<p>12/23/2006</p>	
<p>17.1 Our community and our neighbors in abutting communities have relied on the pending closure of the Landfill. We have invested enormous time and effort since the incomplete and flawed DEIS and SEIS effort of 1999 and 2002 ended with a commitment from the City government and the Mayor to close the site to Municipal Waste in 2008. For the City to change directors in the Department of Environmental Services and then re-launch a plan to continue using the Waimanalo Dump past the closure date is an insult to our island community and an example of a government system out of control.</p>		<p>See response letter.</p>

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17.2 Yes we attended the community meeting sponsored by your department at Nanakuli High School and although you have made this resurrection attempt with consultant facilitators there was not one person supporting the City's effort! In fact, Kumu Kamaki Kanahele said it all at the meeting with the same emotion and disbelief that most of us believe in seeing the City's total disregard and disrespect of previous community input facing the flawed efforts of the past and through meetings too numerous to recall.		See response letter.
17.3 The best I can say is that homeowners in our association are dumbfounded by this re-assessment of the problem after (please count them) EIGHT (8) years [1999-2006] wherein the City does not have a solid waste alternate site but does have a plan and commitment to the community to close Waimanalo Gulch in Kapolei! When you look at the time line over the past eight (8) years the City could have located and prepared the alternate site for business well before the closure date in 2008 for Waimanalo Gulch in Kapolei.		See response letter. <u>Section 7.1.5.3. Improving the Commitment to Alternative Solutions to Landfilling</u> , also identifies prior efforts by the City to promote alternative technology and waste reduction.
17.4 We are opposed to this restart of the EIS preparation process for the subject site and recommend that the alternative site or alternative waste disposal methods are developed and close Waimanalo Gulch at Kapolei on time in May 2008.		See response letter. <u>Section 9. Alternatives to the Proposed Action</u> , identifies alternatives to the continued long-term use of the landfill investigated by the City.
17.5 We agree with the comments of Cynthia Rezentes and Senator Colleen Hanabusa and others published in the EIS Preparation report regarding the many detailed issues and comments that have not been resolved and will need to be a part of the new EIS process. We find that in the face of litigation and mismanagement of the facility that the City continues to shape the decision making process to match a predetermined objective.		See response letter. Comment is acknowledged.
17.6 Our association will be actively involved in every effort to close the Waimanalo Gulch Landfill located in Kapolei as we believe there is a conflict in land use, there are pending legal issues involving \$2.8 million dollars in fines to the City that are directed at the poorly operated facility and that this location is not acceptable.		See response letter. <u>Section 2.3. Environmental Compliance Violations, 2.3.1. State Department of Health</u> . On December 7, 2007, DOH, the City and Waste Management of Hawaii, Inc., agreed to a settlement which resolved the NVO. At that time, there was only a single remaining violation that had not been resolved--the exceedance of permitted grades. On February 20, 2008, DOH issued a grade modification approval which resolved the grade exceedance issue. All alleged violations in the NVO have been resolved.
17.7 The State and the City have designated Kapolei and West Oahu as growth areas with designated mass transit needs and increasing populations. Please drive the roads and highways in Kapolei and see for yourself the litter and filth that travels here daily by truck.		See response letter. The presence of the existing Waimanalo Gulch has made possible economic growth and development through the use of a site for the safe and efficient disposal of municipal refuse. The landfill has supported economic growth and development of not only the Ewa region, but islandwide for all the communities of Oahu. <u>Section 4.2.3. Environmental Controls, Litter</u> , addresses windblown litter control. <u>Section 4.4. Dust and Mud</u> addresses dust control. <u>Section 6.1. Traffic and Circulation</u> addresses traffic control.
18. David J. Reantaso	12/26/2006	
18.1 I would like to take the opportunity to voice my concerns about the proposed expansion of the Waimanalo Gulch Sanitary Landfill... These include environmental hazards - ground water contamination, underground methane fires, potential ocean runoff, and air pollution. Other reasons include the wasting of the City and County of Honolulu natural and financial resources.		See response letter. <u>Section 4.2. Facility Operations</u> , identifies on-site environmental controls. <u>Section 4 Project Description</u> , identifies other project site environmental controls including control of methane, fires, and stormwater runoff. <u>Section 4.7. Regulation of Air Quality</u> , discusses regulatory requirements of WGSL. <u>Section 5.7. Air Quality</u> , discusses air quality at the site and identifies proposed mitigation measures.
18.2 Many private entities offer recycling solutions that would not be harmful to our delicate ecosystem and also offer financially profitability. By not seriously exploring these alternative technologies, the leadership of the City and County of Honolulu will do a disservice to our community.		See response letter. <u>Section 9. Alternatives to the Proposed Action</u> , identifies alternatives to the continued long-term use of the landfill investigated by the City. Recycling was considered as an alternative.

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<p>18.3 If nothing else, close it for monetary reasons. We have already had large fines levied - fines that to this day have not been paid. The fines that will have to be eventually paid - will be paid with our increasingly harder to come by tax dollars. The City's leadership has promised to close Waimanalo Gulch Sanitary Landfill twice. It's time to keep that promise. The permit for expansion should not be granted.</p>		<p>See response letter.</p> <p>-The immediate closure of the Waimanalo Gulch Sanitary Landfill without a feasible alternative is not a reasonable nor prudent action that can be taken.</p> <p>-<u>Section 2.3. Environmental Compliance Violations, 2.3.1. State Department of Health</u>. On December 7, 2007, DOH, the City and Waste Management of Hawaii, Inc., agreed to a settlement which resolved the NVO. At that time, there was only a single remaining violation that had not been resolved--the exceedance of permitted grades. On February 20, 2008, DOH issued a grade modification approval which resolved the grade exceedance issue. All alleged violations in the NVO have been resolved.</p> <p>-The reason for the City's current EIS involve a number of actions that have transpired since completion of the last EIS in December 2002. Documentation of the prior commitment to close Waimanalo Gulch was provided in the EISPN, Section 1, Project Background.</p>
<p>19. Robert H. Kaialau III</p>	<p>12/26/2006</p>	
<p>19.1 The validity of the following mandates for closure is as pertinent today as when they were issued:</p> <ul style="list-style-type: none"> • The State of Hawaii Special Use Permit calls for the closure of the landfill by May 1, 2008... • The planned completion and final closure of the last cell is projected for the end of 5 years from the start of use of the last 14.9-acre expansion area on December 24, 2002. • Summary report and Council Resolution 04-348... • Council Bill 37 (2005)... <p>...Section 5 of the Bill further directed the City to submit to the Council by December 31, 2006, its plan to comply with the ordinance, noted that at a minimum, the City administration shall include in the plan the strategies for, and costs of compliance.</p>		<p>See response letter.</p> <p>Concerning Resolution 04-348, CD1, FD1, and Bill 37 (2005). Resolution 04-348 called for the selection of Waimanalo Gulch as the city's landfill. The reasons for the selection were provided in the EISPN, Section 1.2.2. Council Resolution 04-348, CD1, FD1, Selecting a Site for a New City Landfill. Bill 37 was vetoed by the Mayor and did not become law per the EISPN, Section 1.2.3.</p>
<p>19.2 Any action to further expand the existing Waimanalo Gulch Sanitary Landfill satisfies the description in the Hawaii Administrative Rules, Title 11, Chapter 200 §11-200-12 - Significance Criteria as " . . . an action . . . determined to have a significant effect on the environment..</p>		<p>See response letter.</p> <p><u>Section 14, Significant Criteria</u>, discusses the requirements of the project and the Significance Criteria in HAR 11-200-12 and the relationship to the proposed project.</p>
<p>19.3 The pending expansion permit application is in direct contradiction to all commitments made to date of the City's intent to systematically reduce and eventually cease operation of the existing Waimanalo Gulch Sanitary Landfill.</p>		<p>See response letter.</p> <p><u>Section 2. Project Background</u>, provides the events leading to the current decision to seek the expansion of the WGSL.</p>
<p>19.4 ...Of the 18 counts of violation identified in the Department of Health - Notice and Finding of Violation dated January 31, 2006 (Docket No, 05-SHW-SWS-004); five violations related directly to excess leachate levels, and the operators failure to measure and report as required by the existing permit. Adverse effects on groundwater and aquifers are widely documented, not to mention the direct contamination witnessed on Farrington Highway fronting the landfill site caused by runoff resulting from over saturation during heavy rains...</p>		<p>See response letter.</p> <p><u>Section 2.3. Environmental Compliance Violations, 2.3.1. State Department of Health</u>. On December 7, 2007, DOH, the City and Waste Management of Hawaii, Inc., agreed to a settlement which resolved the NVO. At that time, there was only a single remaining violation that had not been resolved--the exceedance of permitted grades. On February 20, 2008, DOH issued a grade modification approval which resolved the grade exceedance issue. All alleged violations in the NVO have been resolved.</p> <p><u>Section 4.6. Stormwater Management and Section 5.4. Surface Water</u>, describes stormwater management controls and stormwater mitigation measures.</p>
<p>19.5 The existing Solid Waste Management Permit Number LF-0054-02 requires the current facility operator to provide a written plan and relative record keeping documenting the actions taken to minimize free litter through out the landfill facility as well as preventing the occurrence of litter, dust and odors beyond the facility's property line... The failure of the facility operator to insure these mandates are met is well documented by the Department of Health inspectors as well the public. Citation of these violations can also be found in the Jan 2006 Notice and Finding document.</p>		<p>See response letter.</p> <p><u>Section 2.3. Environmental Compliance Violations, 2.3.1. State Department of Health</u>, above, describes the resolution of the DOH violation notice.</p> <p><u>Section 4.2.3. Environmental Controls, Litter</u>, addresses windblown litter control and <u>Section 4.4. Dust and Mud</u>, addresses dust control for the proposed project.</p>

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<p>19.6 Large trucks and loose debris from the facility are an on-going problem. As mentioned above, litter that makes it way beyond the facility's property line attach to automobile windshields and antennas often-endangering drivers.</p> <p>Daily, large trucks exiting the facility speed across the two westbound lanes of traffic in an effort to beat on-coming traffic as they make their way to the east bound lanes headed toward Honolulu often creating near miss traffic accidents.</p> <p>Trucks, waiting to enter the landfill facility are often forced to line-up along the westbound shoulder of Farrington Highway are documented regularly. While waiting to enter the facility, these trucks often leak and seep sludge and other toxic, odorous liquid.</p>		<p>See response letter.</p> <p><u>Section 7.1.5.1. Improving Current Practices</u>, provides mitigation practices against littering off-site and on-site at the landfill.</p> <p><u>Section 7.1.3.2. Community Issues and Concerns Regarding WGSJ</u>, provides mitigation practices for active litter management including vehicular queuing and measures to reduce and prevent such occurrences.</p> <p><u>Section 6.1. Traffic and Circulation</u>, addresses traffic controls and the result of a traffic study.</p> <p><u>Section 4.2.7. Waste Unloading and Compaction</u>, addresses procedures during waste unloading.</p>
<p>19.7 The City and County of Honolulu's administration...continue to operate in direct contradiction to every written plan - accepted and proposed mandating that the existing landfill facility located at Waimanalo Gulch on the Leeward Coast of Oahu be closed. Postponing the solicitation and selection of alternative waste processing technologies, refusal to consider transshipment of waste off-island and the failure to complete the long over-due Solid Waste Integrated Management Plan are the short list of examples. In turn, the City and County has done little to identify and expedite the selection and implementation of any number of available alternative waste processing technologies...</p>		<p>See response letter.</p> <p><u>Section 7.1.5.3. Improving the Commitment to Alternative Solutions to Landfilling</u>, identifies prior efforts by the City to promote alternative technology and waste reduction.</p> <p><u>Section 9. Alternatives to the Proposed Action</u>, addresses the alternatives that were considered by the City to eliminate or reduce the need for landfilling.</p>
<p>19.8 The General Plan for the City and County of Honolulu...sets forth the following policy statement found in Chapter 5: Transportation and Utilities, Objective B... To meet the needs of the people of Oahu for an adequate supply of water and for environmentally sound systems of waste disposal....</p>		<p>See response letter.</p> <p><u>Section 8.6. 8.6. City & County of Honolulu General Plan</u>, discusses Chapter 5, Objective B, Policy 3, 4, 5, 6, and 7.</p>
<p>19.9 As documented in the preparation notice, when the Waimanalo Gulch Sanitary Landfill was designated in 1989, "there was limited to [sic] growth in the Ewa region. Today, almost 20 years later, the City of Kapolei and the surrounding region known as the Ewa Plain are the most rapidly growing areas on the Island of Oahu...because of the administration's indurate response to the Honolulu City Council's request that the SWIM plan be completed in a timely manner; it is incumbent on all permit granting agencies to be influenced by the subsequent Environmental Impact Statement and related State Special Use Permit (SUP) Amendment application to deny any further expansion of the existing Waimanalo Gulch Sanitary Landfill facility.</p>		<p>See response letter.</p> <p><u>Section 7. Socioeconomic and Related Environment, Potential Impacts and Mitigation Measures</u>, discusses the growth of the Ewa region and the relationship of this growth to the subject project.</p> <p><u>Section 2.3. Environmental Compliance Violations, 2.3.1. State Department of Health</u>. On December 7, 2007, DOH, the City and Waste Management of Hawaii, Inc., agreed to a settlement which resolved the NVO. On February 20, 2008, DOH issued a grade modification approval which resolved the grade exceedance issue that was the single remaining violation. All alleged violations in the NVO have been resolved.</p> <p><u>Section 2.3.2. U.S. Environmental Protection Agency</u>, discusses the EPA Notice of Violation (NOV) that is currently under discussion amongst the EPA, the City and Waste Management. Until the negotiations are concluded, there can be no final determination as to the validity of the alleged violations.</p>
<p>20. Carroll E. Cox EnviroWatch, Inc.</p>	<p>12/26/2006</p>	
<p>20.1 I wish to express our strong opposition to the planned expansion of the Waimanalo Gulch Sanitary Landfill, TMK 9-2-03. This opposition is based a [sic] number of concerns related to earlier management practices and the overall operation of the Waimanalo Gulch Sanitary Landfill, which has resulted in an Issuance of Notice and Finding of Violation Docket NO. 05-SHW-SWS-004 consisting of eighteen counts and two hundred and twelve documented incidences supporting the Notice and Finding of Violation.</p>		<p>See response letter.</p> <p><u>Section 2.3. Environmental Compliance Violations, 2.3.1. State Department of Health</u>. On December 7, 2007, DOH, the City and Waste Management of Hawaii, Inc., agreed to a settlement which resolved the NVO. On February 20, 2008, DOH issued a grade modification approval which resolved the grade exceedance issue that was the single remaining violation. All alleged violations in the NVO have been resolved.</p>
<p>20.2 We are [sic] also believe that the City and County of Honolulu's Department of Environmental Services continues to permit the operation of the Waimanalo Gulch Sanitary Landfill in breach of the original contract between the contractor...which is corroborated by the eighteen counts and two hundred and twelve documented incidences supporting the Notice and Finding of Violation. And, we are concerned that the current facility's permit and permit application is inadequate and does not address the concerns of [sic] regarding the Surface Water Management System Design and Final Cover Design.</p>		<p>See response letter.</p> <p>The contract between the City and Waste Management of Hawaii is a public document. The City has monitored the performance of Waste Management under this contract and has taken appropriate action to protect the public interest. As noted above, all alleged violations in the NVO have been resolved.</p> <p><u>Section 4.6. Stormwater Management</u> and <u>Section 5.4. Surface Water</u>, describes stormwater management controls and stormwater mitigation measures. <u>Section 4.1. Construction Activities</u>, describes other features of the proposed design including the final cover design.</p>

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<p>20.3 The City and County of Honolulu has failed to meet all of the conditions required by the Land Use Commission. We do not have a curbside recycling program. We are failing to divert a large portion of the municipal and solid waste from the Waimanalo Gulch Sanitary Landfill. This is confirmed in the City and County of Honolulu's routine practice of closing the H-Power Plant in excess of one hundred days per year and diverting the municipal and solid waste to the Waimanalo Gulch Sanitary Landfill... we are concerned that the City and County of Honolulu has failed to utilize alternative methods of managing Municipal Solid Waste.</p>		<p>See response letter. The City has an on-going green waste curbside recycling program and sought public input in April/May 2007 for a curbside mixed recycling program that is now ongoing. The City has actively sought to increase the use of alternative technologies to reduce dependency on landfilling. In 2007 the City released a request for proposals (RFP) to investigate technology based alternatives, and in early 2008 related a request for proposals for waste transshipment. <u>Section 7.1.5.3. Improving the Commitment to Alternative Solutions to Landfilling</u>, identifies prior efforts by the City to promote alternative technology and waste reduction.</p>
<p>21. Ken Williams, Vice President - Resort Operations Ko Olina Community Association</p>	<p>12/26/2007</p>	
<p>21.1 The EISPN fails to address the inadequacies of the 2002 FEIS, and the continued litigation concerning that document. ... it appears from the EISPN that the planned process fails to adequately consider the social and economic impacts of the landfill.</p>		<p>See response letter. <u>Section 7. Socioeconomic and Related Environment, Potential Impacts and Mitigation Measures</u>, discusses and considers the social and economic impacts of the proposed project.</p>
<p>21.2 The Draft and Final EIS must incorporate the City's Solid Waste Masterplan, which was supposed to be completed by the City in December 2006.</p>		<p>See response letter. The last Solid Waste Integrated Management (SWIM) Plan was completed by the City in 2004. As much as possible the preparation of the subject DEIS is being coordinated with the SWIM Plan. However, the plan is currently under draft and will be coordinated with the DOH and other appropriate parties for approval.</p>
<p>21.3 The EISPN fails to address the Department of Health Notice of Violations, citing a multitude of violations with the operation of the Waimanalo Gulch Landfill...</p>		<p>See response letter. <u>Section 2.3. Environmental Compliance Violations, 2.3.1. State Department of Health</u>. On December 7, 2007, DOH, the City and Waste Management of Hawaii, Inc., agreed to a settlement which resolved the NVO. On February 20, 2008, DOH issued a grade modification approval which resolved the grade exceedance issue that was the single remaining violation. All alleged violations in the NVO have been resolved. <u>Section 2.3.2. U.S. Environmental Protection Agency</u>, discusses the EPA Notice of Violation (NOV) that is currently under discussion amongst the EPA, the City and Waste Management. Until the negotiations are concluded, there can be no final determination as to the validity of the alleged violations.</p>
<p>21.4 Given these violations and the concerns raised by them, the EIS must disclose the impacts that would be caused by the structural failure of the Waimanalo Gulch Landfill. Whether by structural deficiency or, as recently experienced, earthquake, because of the landfill's formation within a gulch at the sole entrance to the Leeward Coast, a failure of the landfill sliding across Farrington Highway would have a significant impact that must be disclosed and discussed.</p>		<p>See response letter. <u>Sections 4.1. Construction Activities, 5.2. Topography, 5.3. Geology, 5.4. Surface Water, 5.5. Groundwater and Hydrology, and 5.6. Natural Hazards</u>, describes major factors considered, potential impacts, and mitigation measures to maintain public health and safety of the facility and site.</p>
<p>21.5 The EIS must address the well documented and continued escape of waste from the Landfill site. This includes an analysis of the fact that HECO had identified the area as one of the windiest locations on the island and how the proposed expansion to higher elevations will create greater problems for waste being blown off the landfill. These disclosures must also identify where this escaping trash is landing and its impact on the land and, more importantly the ocean. The escaping waste goes much further than the "valley rim" as implied by the EISPN.</p>		<p>See response letter. <u>Sections 4.2.3. Environmental Controls, and 7.1.5.1. Improving Current Practices</u>, describes potential impacts and mitigation measures to address litter control.</p>
<p>21.6 The background section fails to identify the specific, sworn statements made by the City at the 2003 Planning Commission Meetings and State Land Use Commission meetings regarding the promised closure of Waimanalo Gulch Landfill, and which resulted in the specific language regarding the Landfill's closure in 2008 being included in both the Planning Commission and Land Use Commission Decision and Orders.</p>		<p>See response letter. <u>Section 2. Project Background</u>, acknowledges the commitments made by the prior administration to close Waimānalo Gulch by 2008.</p>

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<p>21.7 The EISPN fails to recognize that the Committee agreed that the "double blind methodology" was to be advisory only to the group, and was not to be used as a means of "ranking" the potential sites. Furthermore, it is inaccurate to state that the results of the methodology caused "a division in the Committee" or a change in the decision making process. Finally, despite the language in Council Resolution 04-348, the EISPN should accurately reflect that the Office of Informational Practices did not rule that the Committee's report was "void due to violations of the sunshine law." OIP does not have the legal authority to void such action or report. From the Council's actions in passing Council Resolution 04-348 and Bill 37 (2005), it is clear that the Council's position on the City's policy for its solid waste is to close Waimanalo Gulch Landfill.</p>		<p>See response letter. "The City acknowledges your comments. The final decision making by the Mayor's Advisory Committee was within the purview of its individual members to consider, reject, or ignore the results of the double blind process as it considered the optimal site for a landfill. As was noted in the Report of the Mayor's Advisory Committee (Blue Ribbon Committee) on Landfill Site Selection, December 1, 2003, four of the members of the Committee resigned prior to the taking of a vote to move from consensus decision making to voting. The reasons for the resignations are clearly stated in the Report, as is the results of the voting that led to the removal of the Waimānalo Gulch landfill site." "We acknowledge that information concerning the results of Resolution 04-038 and Bill 37 are documented in the EISPN."</p>
<p>21.8 There are many inaccuracies in Section 4.11 of the EISPN. They include the following:</p> <ul style="list-style-type: none"> o A more complete disclosure of the visibility of the Landfill is required. ... the visual impact is much more than a "gray-hued ash fill that resembles a quarry." o Vehicles driving on the hillside and higher elevation portions of the landfill can be seen from the ground and from driving along Farrington Highway. It is not only "From sea" that these impacts are visible. o Landfill operations vehicles CAN be visible - not "may be visible." o The queuing of vehicles, DO make the presence of the landfill apparent - not "may" and this does not make the landfill "momentarily apparent." The continued visibility of trucks, machinery and flying waste make the landfill continually apparent to all who live, visit, or drive through the area. o ..waste being blown off the landfill consists of more than just plastic bags and end up in more places than just the valley rim. Significant amounts of this waste has blown into adjacent properties and into the ocean. 		<p>See response letter. <u>Section 5.10. Scenic and Aesthetic Environment</u>, discusses the potential for visual impacts including existing conditions and identifies mitigation measures. <u>Section 4.2.3. Environmental Controls, Litter</u>, identifies controls to address windblown litter. <u>Section 4.4. Dust and Mud</u>, identifies measures for dust control.</p>
<p>21.9 The EISPN mentioned the hydromulching that has attempted to "landscape" the Landfill. However, it fails to address the less than adequate success of these efforts, and the visible canyons and rivulets created along the face of the landfill during heavy rains as the water erodes the dirt slope of the landfill.</p>		<p>See response letter. <u>Section 5.10. Scenic and Aesthetic Environment</u>, identifies the potential for visual impacts and identifies mitigation measures that will include new landscaping plans. <u>Section 4.6. Stormwater Management</u> and <u>Section 5.4. Surface Water</u>, describes stormwater management controls and stormwater mitigation measures to maintain compliance with applicable regulations and to protect against erosion..</p>
<p>21.10 The EIS must disclose the fact that because of the operator's failure to handle leachate problems at the landfill, large amounts of leachate were pumped in trucks and taken to the Waianae Waste Water Treatment Plant. The amount of that leachate must be disclosed and its true impacts must be investigated...</p>		<p>See response letter. Leachate accepted by the Waianae Wastewater Treatment Plant was, and continues to be, in accordance with regulatory requirements to ensure public health and safety. Leachate management and monitoring will be part of the Solid Waste Operating Permit application. According to ENV, the operator of the Waianae Wastewater Treatment Plant, the leachate accepted by the plant for processing has had very little or no impact on the wastewater effluent quality.</p>
<p>21.11 The EISPN fails to address the significant changes that has occurred in the potential of shipping waste to other landfills since the last EIS. In examining this alternative, the EIS must acknowledge and identify the multitudes of other cities and municipalities throughout the country that truck or ship their waste to other cities and states. Furthermore, the EIS must examine the recent changes in the Federal Rules allowing for the shipping of waste specifically from Hawaii to the mainland.</p>		<p>See response letter. <u>Section 9. Alternatives to the Proposed Action</u>, identifies alternatives to continued use of the landfill including waste transshipment and regulations allowing for waste transshipment.</p>
<p>21.12 ...the EIS must recognize that ash and MSW landfills do not need to be located together. The impacts from these two types of waste are significantly different and given Honolulu's situation and history, the EIS must examine possible solutions where MSW and ash can be landfilled in different locations. This will increase the potential for possible locations for future landfill sites.</p>		<p>See response letter. <u>Section 9.6.2. City & County Requirements for a Landfill</u>, discusses the consideration of using more than one landfill for MSW and ash and residue.</p>

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21.13 the EIS must encompass the multitude of comments - formal and informal - that have been received by the City and Waste Management over the last nearly six years, since the City started the attempts to expand the operations at Waimanalo Gulch Landfill. The operational problems at the Landfill, including those cited by the Department of Health in its Notice of Violation, must be directly addressed, as those have shown a clear failure of operations and proved that the concerns and complaints over the last six years were well founded.		See response letter. <u>Section 2.3.1. State Department of Health</u> , discusses the settlement agreement to the DOH notice of violation and order. <u>Section 15. Comments and Responses to the EISPN</u> , provides the comments and responses to comments to the EISPN.
22. Robert D. Harris Sierra Club, O'ahu Group	12/26/2006	
22.1 This analysis should look [sic] a review of pursuing other alternative [sic], including the use of other sites and implementing comprehensive waste reduction and recycling strategies...		See response letter. <u>Section 9. Alternatives to the Proposed Action</u> , identifies alternatives to the continued long-term use of the landfill investigated by the City.
22.2 Any analysis should consider the connection between continued use of the landfill and the social issues of discrimination, poverty, and the general distribution of environmental risks.		See response letter. <u>Section 7.1.4.2. Other Social Impacts</u> , discusses the concept of environmental injustice.
22.3 Residents in surrounding areas have long complained about odors, plastic bag litter, and other nuisances and environmental hazards from Waimanalo Gulch Landfill. Future housing may be built in the immediate vicinity of the landfill, including the proposed Makaiwa Hills development of nearly 5000 units by Campbell Estate/Makaiwa Hills LLC. A detailed analysis of all anticipated and potential impacts of the Waimanalo Gulch Sanitary Landfill on this housing should be included in the DEIS and FEIS.		See response letter. <u>Section 5.8. Acoustic Characteristics, 5.8.2. Potential Impacts and Mitigation Measures</u> , identifies the potential for noise impacts. <u>Section 7.2.1. Regional Land Uses; 7.2.3. Potential Impacts and Mitigation Measures</u> , identifies the potential land use impacts on surrounding land uses that include Makaiwa Hills, LLC.
22.4 Present and future volume of truck traffic, the levels of odor, gas emissions, fugitive dust and debris, and runoff from the existing land fill has affected the water, air and life quality of nearby residential and commercial properties, and the extent to which the proposed expansion of the landfill itself, will further affect these parameters...Palehua and Hono'uli'uli areas surrounding the Waimanalo Gulch landfill are home to a number of rare and endangered plants, mollusks and birds. Sections of these land areas are recognized as critical habitat for what is may be the last remaining population of the O'ahu elepai'o...thorough studies must be undertaken to determine the presence of any native and endemic animals and plants, both listed and non-listed, within the boundaries of the project and in areas immediately adjacent to it, particularly those mauka of the project that are contiguous with the Palehua and Hono'uli'uli land areas. ... A plan for restoration of the native forest cover should be developed...		See response letter. <u>Section 1. Executive Summary</u> , describes cumulative impacts. <u>Section 6.1. Traffic and Circulation</u> , describes the situation involving traffic as well as mitigation as appropriate. <u>Section 4.2. Facility Operations, Section 4.3. Onsite Roads, Section 4.4. Dust and Mud, Section 4.5. Safety Procedures and Recordkeeping, Section 4.6. Stormwater Management, Section 5.4. Surface Water, Section 5.7. Air Quality</u> , discusses odor, landfill associated gas, fugitive dust, and runoff in terms of operational practices and procedures, potential impacts, and proposed mitigative measures. <u>Section 5.9. Flora & Fauna Resources</u> , discusses the flora and fauna resources of the site, potential impacts, and proposed mitigative measures.
22.5 ...include sufficient baseline data for meaningful analysis of the adverse impact of runoff and other anthropogenic inputs related to existing and proposed landfill activities...should include... discussing how water flows through the project area into local aquifers, ephemeral water sources and... impact nearshore ocean waters...should spell out in detail any mitigation plan...should include an edaphic study that fully discusses the highly permeable and fragile nature of the soils and the effectiveness of any leachete [sic] collection system... should include any calculations or models used to support any conclusion regarding runoff and drainage into local aquifers and erosion of soils...reveal the cumulative impact of all runoff and leaching ...includes pesticides/ biocides..., fertilizers, sedimentation, heavy metals, grease, and other urban runoff ...should study the ...water pollution associated with similar ... landfill developments and discuss the degradation ...caused by similar projects...not glibly assume that mitigation measures would take care of all nonpoint source...problems.		See response letter. <u>Section 4.6. Stormwater Management and Section 5.4. Surface Water</u> , identifies the stormwater controls used at the site, potential for impacts, and proposed mitigation measures. <u>Section 5.5. Groundwater and Hydrology</u> , provides information regarding the WGSL from licensed geologists, hydrogeologists, and other professionals.
22.6 The EIS should use both of the two most useful methodologies of Visual Impact Analysis: 1) Given a structure at point "x," where will it be seen from; and 2) From point "y," what can you see of the development?		See response letter. <u>Section 5.10. Scenic and Aesthetic Environment</u> , discusses the potential for impacts and proposed mitigation measures.

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<p>22.7 The operators of Waimanalo Gulch Sanitary Landfill was recently fined \$2.8 million for various environmental violations. Please discuss steps taken to remedy these violations and ensure that future violations do not occur. Please fully discuss how the public can be assured that any proposed mitigation measures will be performed and will be effective. Please describe the county and state government's monitoring and enforcement programs... staffing levels at the State Health Department's Solid Waste Branch, the City and County's Department of Environmental Services, and the City and County's Planning and Permitting Department sufficient to ensure that promises are kept...</p>		<p>See response letter. <u>Section 2.3. Environmental Compliance Violations, 2.3.1. State Department of Health.</u> On December 7, 2007, DOH, the City and Waste Management of Hawaii, Inc., agreed to a settlement which resolved the NVO. At that time, there was only a single remaining violation that had not been resolved--the exceedance of permitted grades. On February 20, 2008, DOH issued a grade modification approval which resolved the grade exceedance issue. All alleged violations in the NVO have been resolved <u>Section 2.3.2. U.S. Environmental Protection Agency.</u> The Environmental Protection Agency's (EPA) Notice of Violation (NOV) concerning the landfill's gas collection system is currently under discussion amongst the EPA, the City and Waste Management. WMH and the City are in coordination with the EPA to resolve the EPA NOV.</p>
<p>22.8 The EIS should mention and fully discuss many key provisions in the Hawaii State Plan...</p>		<p>See response letter. Section 8.1. Hawai'i State Plan, describes the sections referenced.</p>
<p>23. Cynthia K. L. Rezentes</p>	<p>12/26/2006</p>	
<p>23.1 This EISPN falls short of accurately representing past statements made about the location of this proposed expansion. In the 1984 EIS, approximately 56+/- acres were identified as being available for a landfill with the rest of the property being labeled as having slopes (8 - 18%) which limit the useful area to be used for landfills. The topography has not changed but it is being proposed that the area is now useful for landfills...</p>		<p>See response letter. <u>Section 4. Project Description,</u> identifies the proposed area of the project and the planned construction activities for use of the site.</p>
<p>23.2 There should also be included how this proposed EIS addresses the State Land Use Commission Decision and Order which calls for the closure of the WGSL in May 2008 (which implies no further waste will be accepted at WGSL). This was the date presented by the previous City and County of Honolulu administration.</p>		<p>See response letter. <u>Section 2.1. Project Background,</u> describes the date of expiration of the SUP permit footprint.</p>
<p>23.3 Considering the current facility is still out of compliance with the last EIS/permit which allowed for the expansion of the facility by another 21 acres and a height limitation which has been exceeded, the document should include how the current violations will be mitigated prior to the request for further expansion of the active landfill site.</p>		<p>See response letter. <u>Section 2.3. Environmental Compliance Violations, 2.3.1. State Department of Health.</u> On December 7, 2007, DOH, the City and Waste Management of Hawaii, Inc., agreed to a settlement which resolved the NVO. On February 20, 2008, DOH issued a grade modification approval which resolved the grade exceedance issue that was the single remaining violation. All alleged violations in the NVO have been resolved.</p>
<p>23.4 The discussion on water flow and direction is inadequate... it does not address any affects on the near shore waters...Most of that leachate was disposed of at the Wai'anae Wastewater Treatment Plant. What were the affects of the leachate being added to normal processes with disposal in off-shore waters?</p>		<p>See response letter. According to OEQC, "The EISPN does not give full detail of the proposal but defines the scope of analysis that will be covered in the subsequent environmental impact statement." (A Guidebook for the Hawaii State Environmental Review Process, June 2004). The EISPN is not intended to itself serve as the full disclosure document as required by Chapter 343, HRS. <u>Section 4.6. Stormwater Management, Section 5.4. Surface Water, and Section 5.5. Groundwater and Hydrology,</u> provides information on stormwater, surface, and groundwater characteristics, potential for impacts, and mitigation measures, as appropriate. "The leachate that is accepted by the operator of the Waianae Wastewater Treatment Plant was, and continues to be, in accordance with regulatory requirements to ensure public health and safety. Leachate management and monitoring will be part of the Solid Waste Operating Permit application. As noted in a memorandum to ENV from the operators of the Waianae Wastewater Treatment Plant, the leachate accepted by the plant for processing has had very little or no impact on the wastewater effluent quality that is being discharged to the ocean outfall (see attached memorandum dated October 2, 2007)."</p>
<p>23.5 There does not appear to be any discussion regarding the noise ... and how it might impact the Makaiwa Hills development... housing built near the boundary where the landfill will be operating in the near future...discussion should also extend to litter and odor mitigation...</p>		<p>See response letter. <u>Section 5.8. Acoustic Characteristics, 5.8.2. Potential Impacts and Mitigation Measures,</u> identifies the potential for noise impacts. <u>Section 7.2.1. Regional Land Uses; 7.2.3. Potential Impacts and Mitigation Measures,</u> identifies the potential land use impacts on surrounding land uses that include Makaiwa Hills.</p>

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23.6 While there is a discussion regarding the visual impacts of the landfill from the makai side of the landfill, there is no discussion regarding the visual impact of the landfill from the Wai'anae direction. Currently, the landfill construction of the cells for the permitted expansion is visible over the ridgeline from the Wai'anae direction...		See response letter. <u>Section 5.10. Scenic and Aesthetic Environment</u> , provide further discussion of visual impacts from both the landfill as well as from selected points along Farrington Highway and other locations. Landscaping will be provided to improve the aesthetics of the site.
23.7 ...discussion about the responsibility of the operator to keep mud and dirt on the landfill property and not allow it to be deposited on Farrington Highway...		See response letter. <u>Section 4.4. Dust and Mud</u> , describes practices to reduce the incidence of dust and mud tracking onto the highway.
23.8 The City's SWIMP has Waimanalo Gulch Sanitary Landfill as a critical integral part of the plan. Unfortunately, the plan is now significantly behind schedule. The new plan should not only include the landfill but also include a serious discussion about alternatives to landfills and therefore, could have an impact on whether or not the expansion should be for the amount of time being proposed or be reduced or eliminated.		See response letter. An update of the Solid Waste Integrated Management (SWIM) Plan is on-going by the City. As much as possible the preparation of the SWIM Plan is being coordinated as the DEIS is being prepared. <u>Section 9. Alternatives to the Proposed Action</u> , discusses the alternatives that were considered by the City.
23.9 The EISPN...fails to state that the time to pursue other alternatives actually started from 2002, when the City committed to the communities that other methods would be pursued and no landfills would be needed after 2008. A more comprehensive discussion should be included as to actions already taken and why there was a failure to find any alternatives that could have been implemented to make the five year target.		See response letter. <u>Section 7.1.5.3. Improving the Commitment to Alternative Solutions to Landfilling</u> , identifies prior efforts taken by the City regarding alternatives to landfilling.
23.10 There is no discussion regarding the contract commitments to both H-POWER and Waste Management, Inc. This is significant to making an informed decision as to whether an expansion of the landfill is required if the City believes it is needed, the real length of time that makes sense for the proposal of an expansion.		See response letter. Although no discussion of the contractual agreements between the City and the operators of the H-POWER and Waimanalo Gulch landfill was provided in the EISPN, the contracts are public documents. <u>Section 9.7. Preferred Alternative</u> , discusses the role of recycling, H-POWER, and transshipment as a mix of options reducing the volume of material requiring landfilling.
23.11 The proposed EIS for this expansion of WGSL needs to be as comprehensive as today's knowledge base allows us to have considering the consequences of the action proposed will continue to have effects on our residents for many years to come. The EISPN should do no less and should address all issues brought up in the scoping meetings and via written comments. The submittal of these comments should not be construed as support for the expansion of Waimanalo Gulch Sanitary Landfill but should be viewed as open concerns that continue to not be fully addressed and should be in both the EISPN and EIS.		See response letter. "We have directed our consultant to address the issues raised during the EISPN public comment period as required under Chapter 343, HRS. As you are aware, these issues have been documented and will be discussed in the DEIS."
24. Colleen Hanabusa, Senator President of the Senate Hawaii State Senate	12/26/2006	
24.1 I incorporate by reference my comments set forth in a letter of August 30, 2006 which is found in the EISPN Appendix A. The EISPN fails to address the comments made therein and the Draft and/or Final EIS must do so to comply with the laws.		See response letter.
24.2 Project Background...Section fails to address whether the FSEIS prepared in December 2002 was a "shibai." Clearly it was inadequate and remains a subject to challenge in the Courts. Though a discussion is made about the Landfill Site Selection Process, the EISPN does not address how the preparer of the this [sic] document, as well as the consultant for the Landfill Site Selection Process can conclude that the service life of WGSL is fifteen (15) more years. This is especially troubling when the preparer of the EISPN was also the consultant to the site selection committee and the criteria was NO EXCAVATION.		See response letter. "We offer the following clarification to the above: (1) we acknowledge that your lawsuit concerning the 2002 Final Supplemental Environmental Impact Statement remains the subject of litigation. We do note however that Section 1 contains important information that establishes why the City must act at this time to provide a solid waste refuse facility for use by all the communities of Oahu; (2) The service life of the landfill as presented to the Mayor's Advisory Committee in 2004 was twenty (20) years. The capacity for the current project will be discussed in the Draft EIS (DEIS);

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<p>There should be a concern as whether this consultant is in a conflict of interest given the differing reports. Moreover, there must be a clear statement as to who is paying for the preparation of the various documents and studies required in the EIS process. If, for example, Waste Management is paying then the Final EIS will not truly be that of the City and/or the Department of Environmental Services which should have the general public's interest as its primary goal.</p>		<p>(3) The no excavation remark that you cite comes from the Waimānalo Gulch Expansion, Potential Landfill Site Data Sheets, prepared for the Mayor's Advisory Committee on Landfill Siting, October 2003. The specific reference is to information provided for Criteria No. 23, Landfill Capacity or Site Life. According to the data sheet, "The volume was calculated assuming a 100 foot buffer around the site boundary, 30 acres for infrastructure facilities, no excavation, and filling to the natural grade."</p> <p>The rationale for not incorporating excavation as a factor involved:</p> <p>A. It was not in the consultant's scope of work to do field studies including drilling borings to obtain subsurface information. This is typically the case when doing preliminary siting studies both due to difficulty in gaining access to the property and the high cost of doing field studies. Without these studies, it is not possible to determine excavation depths or difficulty with any degree of certainty. Therefore, it is typical to assume minimal or no excavation in order to compare site capacities;</p> <p>B. Criteria No. 23, therefore, was established to provide an estimate of capacity only based on: an area adjusted with an approximately 100 foot buffer around the perimeter of the site; the use of 30 acres for infrastructure to operate the facility; no detailed engineering calculations incorporating soils conditions to produce information on excavation; and filling of the site to the natural grade of the terrain of the finished site. It is incorrect to conclude or imply on the basis of information from the data sheet alone that in the course of developing a landfill site that no excavation would be required.</p> <p>(4) The City ENV and Waste Management of Hawaii, Inc., are financing the preparation of the EIS. The interest of the general public, and the responsibility for and integrity of the document rests with the City & County of Honolulu." <u>Section 9.6.3.6. Landfill Capacity</u>, provides a discussion of landfill capacity requirements for the City.</p>
<p>24.3 The public needs to know whether any representation made by a Mayor and/or City Council is binding on subsequent administrations. This is especially critical when looking at the Decision and Order of the State of Hawai'i Land Use Commission ("LUC Order") and State of Hawai'i Department of Health's Notice of Violations and Order ("DOH NVO"). The culpability, remedial action and cause of these violations must be discussed.</p>		<p>See response letter.</p> <p>"Representations of officials may become law and be binding when appropriately enacted into law, or through other acts that have the force and effect of law. Subsequent Mayors and/or City Councils may, however, change prior law through appropriate legal processes."</p> <p><u>Section 2.3. Environmental Compliance Violations, 2.3.1. State Department of Health</u>. On December 7, 2007, DOH, the City and Waste Management of Hawaii, Inc., agreed to a settlement which resolved the NVO. On February 20, 2008, DOH issued a grade modification approval which resolved the grade exceedance issue that was the single remaining violation. All alleged violations in the NVO have been resolved.</p>
<p>24.4 A detailed discussion is necessary as to the consequence of the LUC Order and the DOH NVO for the decision maker to have sufficient information to fully consider the proposed action. In that the Operator was selected in 1999; and there have obviously been problems with the manner in which they have performed, there should be a discussion as to whether that contract will be honored or should be honored. The Contract must be made public and the legal rights of all parties addressed.</p>		<p>See response letter.</p> <p>"Please refer to our comment above regarding the NVO. The contract between the City and Waste Management of Hawaii is a public document. The City has monitored the performance of Waste Management under this contract and has taken appropriate action to protect the public interest. As a result, significant improvements to landfill operations have occurred. The City intends to continue to administer the contract to ensure that the rights and responsibilities of the parties involved are addressed and the public interest is protected."</p>
<p>24.5 This introductory section is presented as if this issue is new. The expansion of the WGSL and the larger issue of disposal of municipal solid waste on this island are far from a new issue. This section also begs the issue of the problems with the operations and the operator of the WGSL.</p>		<p>See response letter.</p> <p>"The use of Waimanalo Gulch is not new and as indicated in the EISPN the site has been in use since 1989, approximately 19 years ago. The NVO will be discussed in the DEIS."</p> <p><u>Section 2.3. Environmental Compliance Violations, 2.3.1. State Department of Health</u>, provides information on the resolution of the NVO.</p>

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<p>24.6 ...Project Description...Section of the EISPN is in most parts verbatim from the FSEIS of December 2002. It would appear that given the difference in the slope and other physical characteristics of the expansion that this critical point should have been discussed versus a rehashing of the prior FSEIS... There must be a more detailed discussion as to the slope differential for WGSL in the proposed expansion area.</p>		<p>See response letter. "According the Office of Environmental Quality Control (OEQC), "The EISPN does not give full detail of the proposal but defines the scope of analysis that will be covered in the subsequent environmental impact statement." (A Guidebook for the Hawaii State Environmental Review Process, June 2004). In this regard the EISPN is not intended to itself serve as the full disclosure document as required by Chapter 343, Hawaii Revised Statutes (HRS). The proposed grades and use of the site including details and information will be provided as a part of the DEIS." <u>Section 4. Project Description</u>, provides additional information on the use of the site.</p>
<p>24.7 The expansion will clearly be where the land is steepest and will require excavation. It is, therefore, curious that this EISPN fails to address the amount of native soil and rock which will have to be removed...</p>		<p>See response letter. "The anticipated amount of soils excavation that will be necessary will be described in the DEIS. As indicated in the EISPN, "Information concerning these construction details and discussion of potential impacts and recommended mitigation measures relating to construction associated noise, odor, airborne litter, and storm water erosion will be provided in the DEIS." <u>Section 4. Project Description</u>, provides information on construction of the proposed project. <u>Section 4.1.3. Waste Stream, Soil Excavation, and Soil Usage</u>, provides information on soils usage. <u>Section 4.2. Facility Operations, Section 4.2.3. Environmental Controls, Section 4.3. Onsite Roads, Section 4.4. Dust and Mud, Section 4.5. Safety Procedures and Recordkeeping, Section 4.6. Stormwater Management, Section 5.4. Surface Water, Section 5.7. Air Quality</u>, discusses odor, litter, landfill associated gas, fugitive dust, and runoff in terms of operational practices and procedures, potential impacts, and proposed mitigative measures.</p>
<p>24.8 There needs to be a discussion as to the extent of that construction activity; its impact on the neighbors; and more importantly where will the materials go. The cost of such an activity must be calculated to do a true cost benefit analysis. The rights to the native soil (rock, etc.) must also be addressed. It is believed that with the present operation, the contractor who does the excavation is permitted to sell the rock and soil and keep the funds. If this is the case, the practice must change and the benefit should be to the taxpayers.</p>		<p>See response letter. "The extent of construction, its potential impact on adjoining property owners, and where and how the excavated materials will be utilized will be a part of the DEIS. The owner of the property, the City & County of Honolulu, retains the ownership rights to the excavated materials. Since August 1, 1991, the City has received royalties for any excavated and processed material removed for Waimanalo Gulch Sanitary Landfill." <u>Section 4.1.3. Waste Stream, Soil Excavation, and Soil Usage</u>, provides information on soils usage.</p>
<p>24.9 There needs to be an honest discussion as to whether the expansion of WGSL will require almost a 2 to 1 removal of the native soils. That is to say for 2 cubic feet of air space, 1 cubic feet of native soils will have to be removed. If that is not the case then the assumptions made in the Waste Management contract of 1999 require additional discussion.</p>		<p>See response letter. "The final design of the proposed project, including the height and elevation of the expansion area of the landfill and use of excavated materials, will follow the general guidelines set forth in the 1999 contract. The final design will be based on the use of sound engineering practices and compliance with environmental protection and regulatory requirements."</p>
<p>24.10 Given the recent decisions by the Hawai'i Supreme Court, it is necessary to discuss the concept of public trust... Note that the leachate was disposed of, for most part, in the Waianae Sewage Treatment Plant.</p>		<p>See response letter. "There has been no violation of the public trust. Leachate that is accepted by the plant operator for disposal at the Waianae Wastewater Treatment Plant was, and continues to be in accordance with regulatory requirements to ensure public health and safety. Leachate management and monitoring will be a part of the Solid Waste Management Permit application."</p>
<p>24.11 ...there is inadequate discussion of the leachate...requires a discussion as to the how the build up of the leachate affected or could affect the integrity of liner and the stability of the landfill. It must also be addressed in light of the expansion and the stress it will have upon the liner and the stability of the landfill.</p>		<p>See response letter. "An explanation of the leachate that is generated by the landfill will be provided in the DEIS. A discussion concerning the leachate collection and removal system design, including liner integrity and landfill stability, associated with the generation of leachate will be provided." <u>Section 4.1.4. Geologic Considerations, Section 4.1.5. Liner and Final Cover Systems, Section 4.1.6. Final Cover</u>, provides information on the liner integrity, landfill design, and the Leachate Collection and Removal System.</p>
<p>24.12 It is unacceptable for government to rely upon Waste Management's consultants or experts for stability calculations. This is not acting in the best interest of the public.</p>		<p>See response letter. "The consultants involved with the design of the Waimanalo Gulch Sanitary Landfill do work for both public and private organizations, are registered professional engineers, and are recognized experts in landfill design and stability analysis. Their work has been peer-reviewed by outside experts to ensure the work meets professional engineering standards. All of the work completed is available for public review including all analyses completed during the design."</p>

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24.13 The recent construction of the rock berm wall ...requires discussion as to why it was constructed and how it is necessary for the structural integrity of the landfill. The berm wall is not to be used as a retaining wall and/or the basis for height expansions in the existing landfill.		See response letter. "The stability berm that is referred to was reviewed and approved by the DOH for construction under the current Solid Waste Management Permit. The purpose of the berm is to ensure that the ash monofil area of the landfill meets or exceeds regulatory and engineering design standards."
24.14 ...the height limitations in certain parts of the WGSL have been exceeded. Yet, to date, not [sic] hearings have been held on the height expansion. There needs to be a discussion as to capacity and how the City and Waste Management continue to operate the WGSL and address the violations set forth in the DOH NVO.		See response letter. "Our request to seek a height modification was submitted to DOH in February 2006. The height modification was approved by DOH on February 20, 2008. A discussion of the capacity of the site and the NVO will be provided in the DEIS." <u>Section 4.1.3. Waste Stream, Soil Excavation, and Soil Usage</u> , provides the preliminary design volumes and capacities of the site. <u>Section 2.3. Environmental Compliance Violations, 2.3.1. State Department of Health</u> , provides information on the settlement of the NVO.
24.15 Prior EISs have not acknowledged the cultural significance of the pathway to Palehua which Waimanalo Gulch served as. Also lacking is a discussion as to the environmental impact to the natural preserves for various native birds which Waimanalo Gulch serves as a habitat.		See response letter. "We have forwarded this information to Cultural Surveys of Hawaii, our archaeological and cultural consultant, which is preparing the Cultural Impact Assessment report for further investigation. Their findings will be provided in the DEIS. The potential for impacts to habitat for native flora and fauna will also be provided in the DEIS." <u>Section 7.3. Historic and Archaeological Resources</u> , and <u>Section 7.4. Cultural Impact Assessment</u> , summarizes the archaeological, historic, and cultural resources of the proposed project site including potential impacts and proposed mitigation measures. The Archaeological Inventory Survey and Cultural Impact Assessment studies are provided as appendices to the DEIS. <u>Section 5.9. Flora and Faunal Resources</u> , provides the results of studies of the site with regard to flora and faunal resources.
24.16 The visual impact of WGSL has not been adequately addressed especially with the construction of the rock berm wall. How is this area going to be restored to its original state with a rock berm wall?		See response letter. "An assessment of the potential visual impacts of the proposed project will be provided in the DEIS. This will include the investigation of views from both the landfill as well as from selected points along Farrington Highway and other locations. Landscaping will be provided to improve the aesthetics of the site. However, given the nature of use of the site involving landfilling, it will not be possible to return the site to its original condition." <u>Section 5.10. Scenic and Aesthetic Environment</u> , describes the potential impacts and proposed mitigative measures.
24.17 Odors continue for those who live by the WGSL.		See response letter. <u>Section 4.2.3. Environmental Controls</u> , and <u>Section 5.7. Air Quality</u> , discusses odor including mitigative measures and practice to control odor.
24.18 The role that Ko Olina plays as it relates to the economic growth for West Oahu is significant. While no one would consider placement of a landfill near Waikiki, the City does not hesitate to continue a landfill operations directly across the street from KO Olina.		See response letter. The City does not discount the importance of economic growth wherever it is occurring on the Island of Oahu. While there are no viable landfill sites near Waikiki we do note that places such as Ala Moana Park and the Kakaako Waterfront Park once served as landfills, and that various parts of Windward Oahu once supported landfills.
24.19 a discussion must be had as to what can be done if such a natural disaster caused the landfill to slip onto Farrington Highway. This discussion must look to the fact that expansion will be at steepest part of the footprint of the parcel of land and the stress it will place on the existing landfill. The people of the Waianae Coast have only one way in and one way out.		See response letter. <u>Section 4.1. Construction Activities</u> , and <u>Section 4.8. Emergency Preparedness</u> describes the facility planning to address the potential for disasters. <u>Section 5.6. Natural Hazards</u> , discusses the potential impacts and mitigation measures associated with floods, hurricanes, seismic activity (earthquakes), and tsunami.
24.20 There is no discussion as to how the expansion of WGSL continues to dump on and places the burden on the Waianae Coast. There needs to be a discussion of the concept of environmental justice.		See response letter. <u>Section 7.1.4.2. Other Social Impacts</u> , provides a discussion of "environmental injustice" involving the disproportionate burden of locating WGSL along the Wai'anae Coast.

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24.21 The Legislature is presently developing a plan on Sustainability for the year 2050. It is without any basis that the EISPN arrives at the conclusion that the expansion of WGSL is in conformance with the General Plan. The analysis which led to this conclusion is needed.		See response letter. "The sustainability for our island State is important. The use of Waimanalo Gulch promotes sustainability through the use of an on-island facility that has remaining but unused capacity. Without Waimanalo Gulch, new land, a precious resource, would need to be prematurely used when there is remaining capacity at this existing public facility." "The basis for the conformity of the proposed project with the General Plan is stated in the EISPN. It is noted that the Waimanalo Gulch Sanitary Landfill is in accordance with the Ewa Sustainable Communities Plan (Development Plan), and that this proposed project can only be implemented if it is in accordance with the General Plan."
24.22 The discussion of the Land Use Policies of the area cannot be made without a discussion of the LUC's D&O on the SUP. The D&O states that no later than May 1, 2008, the area shall be "restricted from accepting any additional waste material and be closed in accordance with an approved closure plan." This is the controlling Land Use Order on the site of the proposed expansion.		See response letter. "Necessary approvals, including those of the Land Use Commission and others, will be sought to allow for the proposed project. Further discussion of this item will be provided in the DEIS." <u>Section 2.1. Project Background</u> , and <u>Section 3.3. 3.3. Need for the Proposed Project</u> , identifies and provides a discussion of the LUC SUP order.
24.23 The issue of the protection of the aquifer requires further discussion. The EPA has a map which includes WGSL in the aquifer area. The Board of Water Supply has a map of convenience as it addresses WGSL. These maps must be explained.		See response letter. "The DEIS will identify the agencies with jurisdiction for the establishment of the Groundwater Protection Zone (GPZ) and Underground Injection Control (UIC) Line. A discussion of the relationship between the proposed project and the regulation of the GPZ, UIC, and other water resource requirements will be provided." <u>Section 9.6.3.5. Local Exclusionary Criteria, Groundwater Restrictions</u> , describes and explains the GPZ and UIC zones that are used in the DEIS. <u>Section 5.4. Surface Water</u> , and <u>Section 5.5. Groundwater and Hydrology</u> , provides information on other water resources of the site.
24.24 Alternatives to the Proposed Action. "This discussion in the FSEIS and other documents has been inadequate and continues to be so. After all these years, the City must have a better response on alternative technologies, transshipment and other sites than what is provided. Again, it appears that it is simply easier to continue to the existing landfill; and therefore all attempts to address alternatives in good faith will never be a reality. In that a private landfill is also proposed, the City's position on the landfill and how it will impact on the flow of trash needs discussion.		See response letter. "Alternative technology, transshipment, and other on-island landfill sites will be discussed in the DEIS. The City acknowledges a proposed private landfill in Nānākūli. However, the Waimanalo Gulch Sanitary Landfill is considered the most viable site for O'ahu's future landfill needs for the next approximately 15 years, or until an alternative becomes available that would completely replace the need for a landfill on island." <u>Section 9. Alternatives to the Proposed Action</u> , provides the alternatives that were considered by the City.
24.25 The State Land Use Commission is a State agency not within the City & County of Honolulu. There is also a requirement to secure the DOH permits.		See response letter. "The reference to the State Land Use Commission is based on their participation in the decision making for the State Special Use Permit administered by the City Department of Planning and Permitting. Department of Health administered permit applications including the Solid Waste Management Permit application will be filed for this project."
24.26 It is critical that the decision maker and the general public are made to understand why the promises of government need not be kept. There must also be a discussion as to how much money the City and County makes in the landfill business.		See response letter. "The DEIS will include a discussion of the past history of events related to the future of the landfill, and provide information as to how the decision to propose expansion of the landfill, rather than closure, was reached." "The City combines tip fee revenue from City transfer stations and the landfill. The revenue for FY06 was \$14,051,214 as reported in the City and County of Honolulu Operating Budget, Detailed Statement of Revenues and Surplus, Solid Waste Special Fund (250) Disposal Charges." "A small portion of the tip fee revenue is attributed to commercial accounts disposal at transfer stations. Most of the tip fee revenue is generated by commercial accounts disposal at the landfill. In accordance with Chapter 9, Section 9-4.2, Revised Ordinances of Honolulu (ROH), only businesses, and federal and state agencies accounts are charged a landfill tip fee. Homeowners and eleemosynary organizations pay no fees." <u>Section 2. Project Background</u> , provides the events leading to the consideration of WGSL for the preferred alternative.
24.27 What is also lacking is the fact that in a few years, the status of H Power will also be an issue. If the City decides to re purchase H Power, then that cost must be made known and its impact on the cost of solid waste disposal.		See response letter. <u>Section 9. Alternatives to the Proposed Project, Section 9.7. Preferred Alternative</u> , identifies H-POWER and transshipment as a viable alternative to reduce waste requiring landfilling.

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24.28 If a private landfill operation is permitted and the transshipment of rubbish is also approved, then the impact of such action must also be discussed in terms of the environmental impacts to the public.		See response letter. "As noted, the City acknowledges a proposed private landfill in Nānākūli but considers the Waimānalo Gulch Sanitary Landfill a more viable alternative. The consideration of the Nānākūli site and waste transshipment will be provided in the DEIS." <u>Section 9. Alternatives to the Proposed Project, Section 9.6. Alternative Sites for a Municipal Landfill</u> , provides an evaluation of alternative sites that include Nanakuli. <u>Section 9.4. Transshipment of Waste Off-Island</u> , provides an evaluation of waste transshipment.
25. Colleen Hanabusa, Senator Hawaii State Senate	8/30/2006	
25.1 Standard To Be Met...The condition to all EISs is that it be compiled in "good faith" and sets forth sufficient information. The past practice of the City has shown that EISs have not been compiled in good faith and nor does it provide sufficient information. At the very minimum the City must take its past EISs and explain the discrepancies that have been found and set forth whatever information it now relies upon to justify its change in position.		See response letter. "We appreciate your references to our legal responsibilities under the Hawaii EIS law. Please also refer to Section 1 of the EISPN that contains information that establishes why the City must act at this time to provide a solid waste refuse facility for use by all the communities of O'ahu."
25.2 At the outset, the City must explain why it has changed its position from an expansion of only 5 years to now an additional 15 years. ...A discussion should be had as to whether the City can be bound by its statements under oath like a person.		See response letter. "Prior representations concerning the closure of Waimanalo Gulch have been identified in the EISPN. This information will also be provided in the DEIS." <u>Section 2. Project Background</u> , provides the basis for the City's decision to proceed with the EIS for the project.
25.3 An EIS is "meaningless" if it is self-serving and rationalizes an outcome. The contract between Waste Management, Inc. and the City for the operation of WGSL was entered into in 1999 for 15 years. This was two years before the first Draft EIS in 2000; and three years before the FSEIS. At the very minimum, this shows the decision to expand WGSL was a done deal in 1999. Also explain what was done after the City entered into it in 1999. Also explain what was done after the City said the expansion would be for only 5 years. Was the contract amended?"		See response letter. "The contract amendment dated May 1, 1999, provided for the expansion of the Waimānalo Gulch site. Subsequently, the prior administration decided on a five-year limit for the use of the site. The contract was not amended to a shorter term because the exact date of termination could not have been determined. Although the contract was not amended, the City retains control of the contract and can terminate it at any time when it is in the best interest of the City. As provided in Contract Special Provision 29, the contract can be terminated, "... in whole or in part, whenever the Director shall determine that termination of the contract, in whole or in part, is in the best interest of the City.""
25.4 HRS §343-2 defines an EIS as one that discloses, among other items, the "alternatives to the action and their environmental effects."...HAR §11-200-17 addresses...alternatives as follows: describe in a separate and distinct section alternatives which could attain the objectives of the action, regardless of cost, in sufficient detail to explain why they were rejected...Money is not the paramount criteria in arriving at a decision which is environmentally sound...HAR §11-200-17 F. 5 states that...the discussion of alternatives shall include, where relevant, those alternatives not within the existing authority of the agency...		See response letter. "An examination of alternatives that include other potential landfill sites, waste transshipment, and technology based solutions, will be provided in the DEIS. This will include the consideration of factors that do not involve funding as the major criteria for evaluation." <u>Section 9. Alternatives to the Proposed Action</u> , identifies the alternatives that were considered by the City.
25.5 Ordinance 9-1/1(a)(6)(b)(1) states that by the year 2000, at least 75 percent of the solid waste generated shall be recycled, reused, composted, or otherwise diverted from incineration or placement in the landfill. What is the status and what is the consequence of this non-compliance?		See response letter. "The City acknowledges that it was not possible to increase recycling, reuse, composting and waste diversion to a level that could support up to a 75 percent reduction by 2002. At the same time, ENV is committed to pursuing all reasonable and feasible options that can contribute to reducing our dependency on the use of landfilling. Recent actions involve the establishment of pilot programs for waste recycling and a major decision to expand the capacity of H-POWER to promote recycling through the generation of energy from municipal refuse. We will continue to pursue these and other options with the City Council as well as O'ahu's communities."

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25.6 A major source of "odor" for the landfill is sludge. What is the City's treatment of sludge and for what period of time will it continue to be dumped in the landfill.		See response letter. "Major improvements in the City's handling of sludge at the Sand Island Wastewater Treatment Plant have occurred since the initial start up of the recently constructed waste digester. These improvements have significantly reduced odors and the requirement for the disposal of untreated sewage sludge. We expect that as the facility becomes fully operational that further improvements will result."
25.7 "HAR §11-200-17 D requires the Draft SEIS to "contain a separate and distinct section that includes a statement of purpose and need for a proposed action." ...There is an application for a private landfill pending and also the fact that the Department of Agriculture will now permit the transshipment of MSW. These points must be addressed in discussing any need of the expansion, especially in light of the prior statements that there will be no need for landfills in 5 years."		See response letter. "We appreciate your citation of prior case law concerning the purpose and need for the EIS. The application for the private landfill in Nānākuli and the potential for transshipment as methods to eliminate the need for the proposed Waimanalo Gulch Sanitary Landfill lateral expansion will be provided in the DEIS." <u>Section 9. Alternatives to the Proposed Action</u> , identifies the consideration of the Nanakuli site for a landfill as well as waste transshipment off-island.
25.8 The City must address the discrepancies in all the draft EISs along with the reports provided by RM Towill to the Blue Ribbon Commission which was tasked with siting the new landfill. The criteria was no excavation. RM Towill determined that WGSL had a life of 20 more years with the criteria. This is in direct conflict with other EISs also prepared by RM Towill. What does the City intend to do about this obvious misrepresentation? How does the City explain this discrepancy.		See response letter. "The no excavation remark that you cite comes from the Waimānalo Gulch Expansion, Potential Landfill Site Data Sheets, prepared for the Mayor's Advisory Committee on Landfill Siting, October 2003. The specific reference is to information provided for Criteria No. 23, Landfill Capacity or Site Life. According to the data sheet, "The volume was calculated assuming a 100 foot buffer around the site boundary, 30 acres for infrastructure facilities, no excavation, and filling to the natural grade." Criteria No. 23, therefore, was established to provide an estimate of capacity only based on: an area adjusted with an approximately 100 foot buffer around the perimeter of the site; the use of 30 acres for infrastructure to operate the facility; no detailed engineering calculations incorporating soils conditions to produce information on excavation; and filling of the site to the natural grade of the terrain of the finished site. It is incorrect to conclude on the basis of information from the data sheet alone that in the course of developing a landfill site that no excavation "The 2002 Final Supplemental EIS for the Waimānalo Gulch Expansion, as well as other prior Waimānalo Gulch EIS documents, were prepared by our consultants based on civil engineering design studies supported by geotechnical investigations and/or soils evaluations that are referenced in the EIS documents. The engineering information for the 2002 EIS was provided by Waste Management of Hawai'i, Inc., who utilized licensed professionals to conduct the studies. The factors that can result in different capacities or life of the site would include refinements to the planned design of the site, knowledge of how the soils conditions or topographic changes would affect the design, or adjustments to the site to accommodate new infrastructure or stability features in order to maintain safety or improve the efficient use of the site. There are other factors that can affect capacity or life of the site that will be provided in the DEIS for the proposed project." <u>Section 4.1.2. Features of Construction of Lateral Expansion</u> , provides information on soil usage for the WGSL. <u>Section 9.6.3.6. Landfill Capacity</u> , provides a discussion of landfill capacity requirements for the City.
The extreme slope of WGSL for the proposed expansion and the newly constructed rock berm are related. What is the stability of the expansion? How much native soil will have to be removed? Where will it be removed to? Will the excavated materials be sold?		See response letter. "A discussion of the anticipated excavation requirements for the proposed project will be provided in the DEIS. This will include an estimate on how much soil will need to be excavated, and the stability of the site. The soils removed from the site that will be used for cover material will be stored on site. A decision regarding the release or possible sale of any cover material cannot be made at this time based on the status of the project within the EIS process. The owner of the property, the City & County of Honolulu, however, retains the ownership rights to the excavated materials. Since August 1, 1991, the City has received royalties for any excavated and processed material removed for the Waimānalo Gulch Sanitary Landfill." See reference above and <u>Section 4.1.2.</u> and <u>Section 9.6.3.6.</u>

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<p>25.9 In light of the concern over the stability of slope as evidenced by the construction of the rock berm wall, how will the community be assured about its stability? How is the integrity of the liner tested? Will the berm wall act as the retaining wall to justify and increase the slope?</p>		<p>See response letter.</p> <p>"The DEIS will provide information concerning engineering design standards and practices that ensure the stability of the site. The most recent test of the site's stability involved the recent earthquake event of October 15, 2006, when a magnitude 6.7 earthquake occurred about 10 miles north-northwest of Kailua-Kona. According to our site operator, Waste Management of Hawaii, Inc., an inspection following the earthquake indicated there was no failure or damage to the landfill and its supporting infrastructure as a result."</p> <p>"The stability berm that is referred to was reviewed and approved by the DOH for construction under the current Solid Waste Management Permit. The purpose of the berm is to ensure that the ash monofill area of the landfill meets or exceeds regulatory and engineering design standards, including those for soil retention."</p> <p><u>Section 5.3. Geology, Section 5.3.3. Potential Impacts and Mitigation Measures</u>, provides the geologic basis for the design of the proposed project. <u>Section 4, Project Description, Section 4.1.5. Liner and Final Cover Systems</u>, describes the design features of the liner system.</p>
<p>25.10 The Notice and Finding of Violation ("Notice and Finding") and Order dated January 31, 2006, of the Department of Health ("DOH") as to the operations of WGSL must be addressed... There are also additional violations that were not included in the DOH Order, such as the applicant's failure to submit a revised Closure and Post-Closure Plan no later than May 1, 2005, which was finally submitted on February 22, 2006 and the operators unauthorized night work preparing a new cell for receiving waste.</p>		<p>See response letter.</p> <p>"The Notice of Violation and Order (NVO) was issued by the State Department of Health (DOH) after the alleged violations had been self-reported. The great majority of the alleged violations had been addressed before the NVO was issued. On December 7, 2007, DOH, the City and Waste Management of Hawaii, Inc., agreed to a settlement which resolved the NVO. At that time, there was only a single remaining violation that had not been resolved--the exceedance of permitted grades. On February 20, 2008, DOH issued a grade modification approval which resolved the grade exceedance issue. Thus, all alleged violations in the NVO have been resolved."</p>
<p>25.11 The recent Hokulia case makes clear the State's public trust for the waters of our State. How has this trust obligation been met.</p>		<p>See response letter.</p> <p>"A discussion of state waters and efforts that have been taken by the City and Waste Management to ensure the protection of this important resource will be provided in the DEIS."</p> <p><u>Section 4.6. Stormwater Management</u>, and <u>Section 5.4. Surface Water</u>, provides information on the requirements of the project in relation to DOH administration of state water quality.</p>
<p>25.12 The EIS cannot merely address the proposed expansion. It must address the cumulative effects of the operation of WGSL since the 1980s in addition to the proposed expansion on the Coast, including the disposal of leachate off site at the Waianae Wastewater Treatment plant.</p>		<p>See response letter.</p> <p>"A discussion of cumulative effects as a result of the proposed project will be provided in the DEIS."</p> <p><u>Section 1. Executive Summary</u>, provides a discussion of cumulative effects.</p>
<p>25.13 The EIS must address the concept of environmental justice and how the City's use of this landfill and others in the Waianae Coast affect the community.</p>		<p>See response letter.</p> <p>"A discussion of environmental justice and its relationship to the proposed project will be provided in the DEIS."</p> <p><u>Section 7.1.4.2. Other Social Impacts</u>, discusses the concept of environmental injustice.</p>
<p>25.14 These are the concerns and issues which must be addressed in the EIS. It continues to remain my position that WGSL must close...</p>		<p>See response letter.</p> <p>"We acknowledge your opposition to the proposed project and have included you as a consulting party to the EIS process for this project."</p>
<p>26. Henry Eng, FAICP, Director Department of Planning and Permitting City & County of Honolulu</p>	<p>12/26/2006</p>	
<p>26.1 Pg. 1-1, paragraphs 2 and 3: Condition 12 of the Land Use Commission's Decision and Order date June 9, 2003 states...not beyond May 1, 2008, the 200-acre property shall be restricted from accepting any additional waste material and be closed in accordance with an approved closure plan. We interpret the above condition to mean that the landfill cannot accept all forms of waste, including H-POWER ash, residue, and unacceptable wastes. On paragraph 3, we suggest the word 'accepted' be used instead of 'approved'.</p>		<p>See response letter.</p> <p>"This recommendation is noted. However, in reviewing the OEQC's requirements for the preparation of EIS documents, the term "approved" is correct in usage."</p>

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26.2 Pg. 1-2, paragraph 1 : The date the Special Use Permit amendment is approved is the date the Land Use Commission's Order is effective, June 9, 2003. The footnote should be revised accordingly. Also, please delete the word 'municipal' in the last sentence.		See response letter. "This recommendation is noted and will be addressed in the DEIS." <u>Section 2.2. Events Affecting the Decision to Expand Waimanalo Gulch</u> , provides this correction.
26.3 Pg. 1-13, paragraphs 1 and 2: The site should be consistently described as being located in Waimanalo Gulch, Honouliuli, Ewa, Oahu. Please make the necessary changes to all references on location. When the landfill received its Special Use Permit (SUP) approval on April 20, 1987, the approved landfill area was 60.5 acres. On October 31, 1989, the Land Use Commission (LUC) approved a 26 acre addition to the original approved area to include support areas of the area approved for landfilling. Thus, at the time when the landfill began initial operations, the landfill and support areas was limited to 86.5 acres and should not be described as being 200 acres.		See response letter. "This recommendation is noted and will be addressed in the DEIS." Note: reference has been revised to Waimanalo Gulch, Oahu, Hawaii. <u>Section 3.1. Project Location and Area of Use</u> , provides clarification between area of the approved landfill and the proposed project.
26.4 Pg. 2-3, paragraph 1: Please indicate what uses are proposed for the 100-foot buffer. Also, will there be any part of the 200-acre property left undisturbed or as it was prior to landfilling operations? If so, please describe and map these areas.		See response letter. "The area of buffer is intended to remain free of actual landfilling and placement of waste. Other locations encompassed by the 92.5 acres where uses are known at this time will be provided in the DEIS. Some of the proposed uses include landscaping, access roads, grading, environmental monitoring and stockpiling of excavated materials that will be reused on-site for cover material." <u>Section 4.1. Project Description</u> , provides the uses of the proposed project area that are known at this time.
26.5 Pg. 2-4, paragraph 4: Condition 12 of the LUC Decision and Order of June 9, 2003, applies to the entire 107.5-acre approved area, not just the 21-acre expansion area.		See response letter. This recommendation is noted and will be addressed in the DEIS. <u>Section 3.3. Need for the Proposed Project</u> , describes the entire approved area as 107.5 acres.
26.6 Pg. 2-1 5, paragraph 1: The Draft Environmental Impact Statement (DEIS) should indicate that portions of the 92.5-acre proposed expansion area was graded, for what purpose, when, and whether these areas are still being disturbed for landfill operations.		See response letter. "This recommendation is noted and will be addressed in the DEIS." <u>Section 4.1.1. Project Location</u> , describes the limited area within the proposed project area that was graded to maintain safety of the existing Cell E-4.
26.7 Pg. 3-1, Section 3.2.: This section should state whether regulated hazardous waste is accepted, examples of unacceptable waste and all types of residue, the quantity and frequency of sewer sludge and related sewage residue accepted, and whether delivery of wastes after normal business hours also include other processes involving spreading, compacting, covering, relocation, or other waste disposal landfilling processes normally associated with operations during regular business hours.		See response letter. "The types of waste that are accepted at the landfill will be provided in the DEIS. Processed sewage solids deliveries have recently been reduced in volume and frequency with the operation of the Synagro waste digester at the Sand Island Wastewater Treatment Plant. Other landfill associated practices will be described in the DEIS." <u>Section 4.2. Facility Operations</u> , identifies the types of waste that are accepted including unacceptable waste that is not. This section also describes other practices associated with operations.
26.8 Pg. 3-4, Section 3.3.: Detailed information on irrigation for landscaping/revegetation should be provided in the DEIS.		See response letter. "The DEIS will provide further information on landscaping as well as irrigation usage for the proposed project. Other points of information concerning use of the site and operational practices will be included." <u>Section 6.3. Potable Water</u> , describes water use for irrigation and dust control. <u>Section 4.2. Facility Operations</u>
26.9 The DEIS should describe existing and proposed cell construction, reclamation, revegetation, closure, monitoring, and reuse across the entire 200-acre property and what will be/have been disposed in each cell, the order in which each cell has been/will be completed and reclaimed/revegetated/reused.		See response letter. "The DEIS will provide information on operational practices and site development that will include the proposed location of cells, infrastructure, and landscaping for the proposed project. Other points of detail including the order of use of the cells, or the waste content of the cells, or the final reuse across the 200 acre site have not yet been fully determined. As much as possible, the information that is available for the proposed project will be provided." <u>Section 4. Project Description</u> , provides information on the use of the site for the existing and proposed area of use.

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<p>26.10 The DEIS should disclose how the expansion area will be integrated into its overall phasing of operations, from cell construction to reuse, and whether phasing such operations would outweigh the benefits, if any, of maintaining portions of its operations at the makai portion of the property, i.e., support services and ash monofils.</p> <p>Discussions regarding whether impacts to the community and the environment could be minimized by closing/reclaiming/reusing the completed portions of the existing landfill closest to Farrington Highway and relocating its operations further into the gulch should be included in the DEIS. This could include relocation of the scale house, maintenance operations, and other noxious activities since much of the 92-acre expansion area is located at the northern portion of the property.</p>		<p>See response letter.</p> <p>"Preliminary site and engineering plans of the relationship of the proposed project to the existing area of use will be provided in the DEIS. The specific phasing plan has not yet been developed. However, the project phasing will be designed to minimize the potential for environmental impacts due to operation of the landfill."</p> <p><u>Section 4. Project Description</u>, provides operational information on the proposed project including the preliminary construction drawing layout of the site.</p>
<p>26.11 Details should be provided as to what drainage and berming techniques will be applied at the property's mauka boundary since the gulch extends further mauka of the property line.</p>		<p>See response letter.</p> <p>"A discussion of drainage and geotechnical soils stability controls that will be implemented for the proposed project will be provided in the DEIS."</p> <p><u>Section 4.6. Stormwater Management</u>, <u>Section 5.4. Surface Water</u>, and <u>Section 5.5. Groundwater and Hydrology</u>, identifies the considerations that were factored for the design of the site.</p>
<p>26.12 The DEIS should include a timeline showing all permit processing timeframes, start of construction within the expansion area, projected closure and reclamation of completed cells within the entire 200-acre property.</p>		<p>See response letter.</p> <p>"The schedule for the proposed lateral expansion of the site will commence upon approval of all required permits and land use approvals. The status of these approvals will be provided in the DEIS."</p> <p>"The rate of use of the proposed landfill cannot be precisely projected. This is because the capacity available will continue to be influenced by (1) the rate at which refuse is disposed of due to economic and population conditions, and (2) the rate at which refuse diversion efforts are successful."</p> <p><u>Section 12. Permits and Regulatory Approvals That May be Required</u>, identifies the permits required and the proposed filing status of each.</p>
<p>26.13 The DEIS should include a visual analysis of the landfill from current conditions to closure and reclamation by cells/monofils from public vantage points such as Ko Olina, Farrington Highway, Makaiwa Hills, and Honokai Hale.</p>		<p>See response letter.</p> <p>"A visual analysis will be undertaken to assess the potential for adverse viewplane impacts associated with the proposed expansion of the site. This information will be provided in the DEIS."</p> <p><u>Section 5.10. Scenic and Aesthetic Environment</u>, provides the visual assessment of the site including discussion regarding potential impacts and proposed mitigation measures.</p>
<p>26.14 A detailed landscape plan showing screening along Farrington Highway and proposed vegetation/topographic features on completed cells/monofils/other waste disposal site on the 200-acre property.</p>		<p>See response letter.</p> <p>Proposed mitigative measures that will include landscaping will be provided in the DEIS.</p> <p><u>Section 5.10. Scenic and Aesthetic Environment</u>, provides a landscaping plan and other elements to mitigate the potential for visual impacts.</p>
<p>26.15 Initial construction activities for the expansion of the existing landfill may require grubbing, grading and stockpiling permits. Furthermore, a grading permit may be required for the final cover that will be placed prior to landfill closure.</p>		<p>See response letter.</p> <p>"The permits that may be required for the expansion of the site will be provided in the DEIS."</p> <p><u>Section 12. Permits and Regulatory Approvals That May be Required</u>, identifies the permits required and the proposed filing status of each.</p>
<p>26.16 A drainage report may be required at a later date.</p>		<p>See response letter.</p> <p>"This is acknowledged. Information concerning stormwater drainage will be provided in the DEIS."</p> <p><u>Section 4.6. Stormwater Management</u>, and <u>Section 5.4. Surface Water</u>, provides information that has been completed on drainage and stormwater control.</p>
<p>26.17 The DEIS should include a current (imaged in 2007) high resolution aerial photo of the entire 200-acre property.</p>		<p>See response letter.</p> <p>"A current aerial photograph will be provided in the DEIS."</p> <p><u>Section 3. Introduction</u>, see Figure 3-3.</p>
<p>27. Robert Au</p>	<p>12/26/2006</p>	
<p>27.1 A fire that originated from the landfill burned down one of our homes, and we will now have to go through the new building permit procedures to have it established again.</p>		<p>See response letter.</p> <p>"We are not aware of a fire from the landfill causing the loss of the home that you describe. We ask that you contact us concerning this matter so that it can be properly investigated. Please contact Ms. Wilma Namumnart, of our office at 692-5358."</p>

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27.2 We feel that the health qualities of living in this area are compromised, and that property values have been suppressed because of the current environment that the landfill has created.		See response letter. "A number of environmental factors will be investigated as part of the Draft EIS (DEIS). This will include air, hydrology and geology, flora and fauna, and socioeconomic factors associated with use of the site for the proposed project. Potential for adverse environmental effects will be researched and as appropriate, mitigation measures will be recommended to minimize or ameliorate the potential for impacts." <u>Section 5.5. Groundwater and Hydrology, Section 5.7. Air Quality, Section 5.9. Flora and Faunal Resources, Section 7.1. Socioeconomic Characteristics</u> , provides the information indicated in the response letter.
27.3 ...A study should be done on the impact of Hawaii Electric's Kahe Power Plant and Waimanalo Gulch Landfill on the fresh water table in this area and the long term effects to our island. Kahe valley (Waimanalo Gulch) has a 10 year flood plane [sic] prior to the creation of this landfill. There is a stream bed with a bridge under this landfill which is a good indication what can happen at this location. We are very concern [sic] about this potential...		See response letter. "Although the City does not operate the Kahe Point Power Generating Station, the DEIS for the proposed Waimanalo Gulch Sanitary Landfill Expansion project will provide water quality and hydrogeological information on surface and ground water resources that may be affected by the use of the landfill. This research will be undertaken by a licensed professional. Data collected from the course of the study will be included as part of the DEIS." "Information concerning storm water drainage and planned drainage control features to ensure short- and long-term protection of the land and nearshore waters will also be provided." <u>Section 5.4. Surface Water, Section 5.5. Groundwater and Hydrology, Section 4.6. Stormwater Management, Section 4.1. Construction Activities, and Section 4.2. Facility Operations</u> , describes the site resources in relation to the proposed project, including potential impacts and mitigation measures.
27.4 It was presented to the public as a solid waste Waimanalo Gulch landfill, at a certain size, and set time limitation for it [sic] existence. The City has expanded and change [sic] these factors twice, and are now trying to do it again...It is time that agreements are honored, and not changed at the City's convenience.		See response letter. "Please refer to Section 1 of the EISPN that provided important information that establishes why the City must act at this time to provide a solid waste refuse facility for use by all the communities of Oahu."
27.5 The landfill is part of a historical sight [sic]. Fort Arizona is located on top of a mountain ridge at Kahe Point adjacent to and part of "Waimanalo Gulch Landfill"...Currently, to get to it, one has to drive through the landfill.		See response letter. "Your recognition of the Battery Arizona site is noted. For clarification, we note that the Battery Arizona bunker complex lies within the landfill property, however, the location of the turret is within the adjacent Hawaiian Electric Company property. An examination of this site as well as other potentially important historical sites and features will be further described in the DEIS. As appropriate, mitigation measures will be recommended to ensure against adverse effects." <u>Section 7.3. Historic and Archaeological Resources</u> , provides a description of the archaeological and historic resources found on site, and includes discussion concerning potential impacts and proposed mitigation measures.
28. Ernest Y. W. Lau, Public Works Administrator Department of Accounting and General Services State of Hawaii	12/27/2006	
28.1 Thank you for the opportunity to review the information regarding the subject project. We support the City and County of Honolulu's efforts in resolving the issues related to the island of Oahu's municipal refuse. We have no additional comments to offer at this time.		NA
29. Barry Fukunaga, P.E., Director of Transportation Department of Transportation State of Hawaii	12/28/2006	
29.1 The EISPN discussed alternative actions involving transporting refuse to another landfill facility outside of Hawaii. If one of the alternatives involves possible use of facilities at the State harbors, particularly Honolulu or Kalaeloa Barbers Point Harbor, to collect and stage refuse before shipping, further EIS evaluation should fully analyze the impacts to handling refuse at the harbors, including the congestion already being experienced at the harbors.		See response letter. "The investigation of alternatives in the Draft EIS (DEIS) will include waste transshipment and the potential for impacts to harbor facilities under jurisdiction of the Department of Transportation (DOT). We appreciate there is congestion already present at the harbors and will note this in the DEIS. The full assessment of traffic impacts, however, should be investigated by the party or parties responsible for the transshipment of waste from Oahu for the specific locations where it is proposed." <u>Section 9.4.6. Potential Issues with Waste Transshipment</u> , identifies congestion as a potential issue.

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29.2 The EISPN stated that a traffic assessment report is being prepared. The report should address traffic conditions and ingress/egress at the landfill facility. Prior situations or events involving vehicle movements at the access on Farrington Highway should be reviewed, especially for incidents or conditions where improvements at and around the entry intersection may be needed. The report should also cover having sufficient on-site queue area for vehicle waiting lines to avoid any back ups at or onto the highway.		See response letter. "We confirm the traffic assessment will investigate traffic conditions and ingress/egress at the facility, review vehicular movement along Farrington Highway from and to the facility, and provide recommendations concerning vehicle queuing to avoid congestion at or onto the highway." <u>Section 6.1. Traffic and Circulation</u> , presents the findings of the traffic assessment and includes proposed mitigation measures.
30. Laura H. Thielen, Director Office of Planning State of Hawaii	12/29/2006	
30.1 The State has an affirmative duty to protect Hawaii's nearshore waters. Please discuss how stormwater and wastewater generated by the project will be prevented from reducing the quality of nearshore water.		See response letter. "The Draft EIS (DEIS) will provide information on environmental management of stormwater and wastewater associated with the proposed project. Potential for impacts and proposed mitigation measures will be described to prevent degradation of nearshore state waters." Section 4.6. Stormwater Management and Section 6.2. Wastewater, provides information on stormwater controls and wastewater facilities to protect water quality.
30.2 Water resource protection is a critical State issue. The proposed project is within a designated Water Management Area. Please include information on the drinking water and non-potable water sources that will be utilized for the project.		See responses letter. "Information relating to water supply, public health, and cultural/historic resources is under investigation and will be provided as a part of the DEIS." <u>Section 5.5.2. Site Groundwater and Hydrogeology</u> , <u>Section 5.5.3. Project Site in Relation to Protected Groundwater Areas</u> , describes the water resources underlying the proposed project site. <u>Section 6.3 Potable Water</u> , identifies the Board of Water Supply as the source of potable water for the project.
30.3 If the project will have a potential to generate hazardous materials or result in the possible contamination of the air, soil, or water, please discuss how public health and safety will be protected.		<u>Section 4.2.4. Material Acceptance</u> , hazardous waste is considered an unacceptable material not for disposal in the landfill. <u>Section 4.7. Regulation of Air Quality</u> , <u>Section 5.7. Air Quality</u> , <u>Section 5.3.2. Soils</u> , <u>Section 4.6. Stormwater Management</u> , <u>Section 5.4. Surface Water</u> , and <u>Section 5.5. Groundwater and Hydrology</u> , describes the potential for adverse effects including generation of potentially hazardous materials, and proposed mitigation measures.
30.4 Please include an inventory survey of cultural and historic sites, with monitoring and preservation plans approved by the State Historic Preservation Division. Please discuss how access for Native Hawaiians for traditional and customary practices will be preserved to include visual landmarks if applicable.		<u>Section 7.3. Historic and Archaeological Resources</u> and <u>Section 7.4. Cultural Impact Assessment</u> , provide the results of the Arch. Inventory Survey and Cultural Impact Assessments conducted for the project including potential impacts and proposed mitigation measures. The sections will also describe the status of approval of any monitoring and preservation plans proposed.
30.5 Please include an inventory of flora and fauna on the project site and any required protections. Consider in the design of your field observations including both wet and dry season surveys to capture the fullest range of flora and fauna. Please include a description of recreational uses on or near the project site. In addition, a description of scenic resources should also be included.		<u>Section 5.9. Flora and Faunal Resources</u> , provides the results of botanical and faunal studies conducted for the proposed project. <u>Section 6.10. Parks and Recreation</u> , provides a description of recreational uses in the area. <u>Section 5.10. Scenic and Aesthetic Environment</u> , provides a description of the scenic and aesthetic environment of the site, including potential for impacts and mitigation measures. The design of vegetative treatments considering dry and wet seasonal changes are provided.
30.6 The State oversees protection of natural, cultural, and economic resources within the coastal zone. Please discuss how the proposed project will balance the competing values of economic development and preservation of coastal resources, including protection from hurricane, storm surge, flood hazard, volcano, and soil erosion as applicable.		<u>Section 8.5. Hawai'i Coastal Zone Management Program</u> , provides a discussion of the proposed project in relation to the objectives of the Hawai'i CZM Program.
31. Russell Y. Tsuji, Administrator Department of Land and Natural Resources Land Division State of Hawaii	1/23/2007	

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31.1 ...the Department of Land and Natural Resources has no comment to offer on the subject matter.		NA
32. Lawrence T. Yamamoto, Director Natural Resources Conservation Service United States Department of Agriculture	1/23/2007	
32.1 We have reviewed the above mentioned document and have no comment at this time.		NA
33. Melvin N. Kaku, Director Department of Transportation Services City & County of Honolulu	1/23/2007	
33.1 The Draft EIS should identify which roadways will be providing access to the project site during construction of the landfill expansion.		See response letter. <u>Section 6.1. Traffic and Circulation</u> , identifies Farrington Highway as the major roadway providing access to the site.
33.2 Comments should be requested from the State Department of Transportation (SDOT) because access to the landfill is from Farrington Highway, which is under SDOT jurisdiction.		See response letter. "Comments for the subject project have been requested from the State Department of Transportation who, in addition to the Department of Transportation Services, will continue to be consulted parties for the duration of the EIS process." <u>Section 15. Comments and Responses to the EISPN</u> , see comment letter from DOT, December 28, 2006.
34. Steven Y.K. Chang, P.E., Chief Solid and Hazardous Waste Branch Department of Health State of Hawaii	2/9/2007	
34.1 It is noted on page 2-5 that a 100-foot buffer will be maintained between landfill activities and the property line will be maintained. We note that the Makaiwa Hills residential development is proposed on land adjacent to the landfill. Ideally, buffers would be able to contain the impacts of landfill activities, such as odor and windblown litter, entirely within facility boundaries. We are concerned that the proposed buffers are not sufficient to minimize impacts on housing and/or associated land uses.		See response letter. "The area of buffer is intended to remain free of actual landfilling and placement of waste. As required, other measures to reduce the potential impacts of nuisance concerns including odor and windblown litter will be described in the Draft EIS (DEIS)." <u>Section 4.2.3. Environmental Controls</u> , provides information on management of litter, including windblown litter, and odor. <u>Section 7.2. Land Use and Ownership</u> , provides information on mitigation measures related to nearby properties to the landfill.
34.2 The SWS also notes that the proposed landfill expansion requires a solid waste management permit, and will address all other issues through the permit application process.		See response letter. "We acknowledge that a solid waste management permit application will be required for the proposed project and look forward to further working with you to address the requirements of the Solid and Hazardous Waste Branch." <u>Section 12. Permits and Regulatory Approvals That May be Required</u> , identifies the Solid Waste Management Permit.

Table 1-3
Summary of Final EIS Comments and
Responses to the WGSL DEIS

**Table 1-3: Summary of Final EIS Comments and Responses to the
Waimanalo Gulch Sanitary Landfill Expansion DEIS**

Note: This table contains a summary of the comments provided in Section 16-Comments and Responses to the DEIS.
See Section 16 for the specific comments received and responses provided.

<u>Commenting Party/Itemized Comments</u>	<u>Date of Letter</u>	<u>FEIS Section Reference and Comments*</u>
<u>1. Alvin K. Tomita, Acting Fire Chief</u>	<u>6/2/2008</u>	
<u>Honolulu Fire Department</u>		
<u>City & County of Honolulu</u>		
<u>1.1 The Honolulu Fire Department reviewed the materials provided and has no objections to the project.</u>		<u>We acknowledge that you have no objections to the proposed project.</u>
<u>2. George W. Niotta</u>	<u>6//2008</u>	
<u>2.1 Will there be no additional trucks taking trash to the dump? Will the [Kapolei] streets be less torn up by the increased traffic?</u>		<u>The answer to your question regarding additional trucks hauling refuse to the Waimānalo Gulch Sanitary Landfill Lateral Expansion site was addressed by the Traffic Impact Report, which is a part of the subject DEIS. According to the DEIS, Section 6.1.1. Traffic Impact Report, the existing and projected "with project" conditions indicated that "The critical traffic movements at the intersection of Farrington Highway with the WGS (Waimānalo Gulch Sanitary Landfill) access road are expected to continue operating at LOS (level of service) "B" and LOS "C" during the AM and PM peak periods, respectively. The total traffic volumes entering the intersection are expected to increase by less than 1% during both peak hours of traffic with proposed expansion. These increases in the total traffic volumes are in the range of daily volume fluctuations along Farrington Highway and represent a minimal increase in the overall traffic volumes."</u> <u>The amount of increased vehicles entering the proposed landfill equate to approximately 11 southbound vehicles during the morning peak period (between 6:15 am and 7:15 am) and 31 southbound vehicles during the afternoon peak period (between 3:45 PM and 4:45 PM). This increase in traffic, while minimal, represents the provision of an important public service for Kapolei and all the island communities of O'ahu, by making possible the collection and disposal of municipal refuse.</u>
<u>2.2 I realize the City & County has made up its mind to expand the dump, but at least be honest-- "no adverse environmental impact" is definitely not true or honest.</u>		<u>The project DEIS represents major effort by the City and Waste Management of Hawai'i to identify potential adverse environmental impacts and appropriate mitigation measures to reduce or otherwise minimize the effects of the proposed project. No less than eight independent special studies and several engineering studies have been commissioned and are referenced in the subject DEIS. We urge you to review these documents and the mitigation measures that have been proposed to address the potential for environmental impacts.</u>
<u>3. Eugene C. Lee, P.E., Director</u>	<u>6/9/2008</u>	
<u>Department of Design and Construction</u>		
<u>City & County of Honolulu</u>		
<u>3.1 The Department of Design and Construction has no comments to offer at this time.</u>		<u>We acknowledge that you have no comments concerning the subject project.</u>
<u>4. Boisse P. Correa, Chief of Police</u>	<u>6/10/2008</u>	
<u>Honolulu Police Department</u>		
<u>City & County of Honolulu</u>		
<u>4.1 This project should have no significant impact on the facilities or operations of the Honolulu Police Department.</u>		<u>We acknowledge that the proposed project should have no significant impact on the facilities or operations of the Honolulu Police Department.</u>
<u>5. Craig I. Nishimura, P.E., Director</u>	<u>6/13/2008</u>	
<u>Department of Facility Maintenance</u>		
<u>City & County of Honolulu</u>		
<u>5.1 We have no comments to offer as the facility does not impact us.</u>		<u>We acknowledge that you have no comments to offer and that the proposed project will not impact your Department.</u>

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<p><u>6. Yoshinori Imagawa</u></p> <p><u>6.1</u> <u>The company that runs the Waimanalo Gulch Landfill has had serious, repeated violations and fines in the past. There is no reason to believe that these violations or more troubling violations won't occur in the future.</u></p>	<p>6/28/2008</p>	<p><u>It is acknowledged that prior violations involving the State Department of Health (DOH) and the Environmental Protection Agency (EPA) have occurred in the past at the Waimānalo Gulch Sanitary Landfill. On December 7, 2007, a settlement agreement was reached with the DOH which settled all issues arising from and related to the notice of violation.</u></p> <p><u>At the present time the City and Waste Management of Hawai'i are fully cooperating and working with the EPA to address elevated underground temperatures at the landfill which are higher than anticipated, but which are not indicative of underground combustion conditions such as a fire. A detailed discussion of this item was provided in the DEIS, in Sections 2.3.2. U.S. Environmental Protection Agency and 5.7.3. Potential Impacts and Mitigation Measures (Air Quality).</u></p> <p><u>It is important to note that throughout the events involving the DOH and EPA that self-reporting procedures have remained in place to notify governmental regulatory agencies of the operating practices and procedures applied at the landfill. At no time was the health and safety of the public at risk, and we anticipate that based on these procedures, that sufficient safeguards will continue to maintain public health and safety.</u></p>
<p><u>6.2</u> <u>It is unfair and unjust to approve the expansion of Waimanalo Gulch Landfill without first implementing curbside recycling inclusive of, but not limited to, green compostable waste, glass, paper, newspaper, aluminum and cardboard. Diversion and waste to energy programs must occur prior to, or in conjunction with any expansion.</u></p>		<p><u>The City believes that curbside recycling, waste diversion, and refuse to energy are all important programs that will contribute to reducing our islandwide dependency on landfilling. However, these programs, including a number of other alternatives cited in the project DEIS, will not by themselves completely eliminate the need for a municipal sanitary landfill. For refuse that cannot be further recycled or otherwise reused, a landfill must continue to remain a key element of the City's refuse management system even as it continues to explore, examine, and implement the waste diversion and refuse to energy systems that you identify.</u></p>
<p><u>7. Orlando Davidson, Executive Officer</u> <u>Land Use Commission</u> <u>Department of Business, Economic Development & Tourism</u> <u>State of Hawaii</u></p>	<p>7/3/2008</p>	
<p><u>7.1</u> <u>We confirm that the site of the lateral expansion of the WGSL is designated within the State Land Use Agricultural District.</u></p>		<p><u>We acknowledge your comment.</u></p>
<p><u>7.2</u> <u>In accordance with section 1 1-200-1 7(e), Hawaii Administrative Rules (HAR), a project description, including, among other things, a historic perspective, should be provided. We acknowledge the background of the WGSL provided in Section 2 of the DEIS, including reference to the recent action of the Land Use Commission (LUC) that extended the deadline to accept solid waste at the WGSL from May 1,2008, to November 1,2009. In the interest of full disclosure, please also include the appeals filed by the KO Olina Community Association (KOCA) and Colleen Hanabusa to the decisions of the City and County of Honolulu Planning Commission (Planning Commission) and the LUC in regard to the deadline extension.</u></p> <p><u>We understand that with the lateral expansion of the WGSL on the unused 92.5-acre portion of the 200-acre site, a minimum life of approximately 15 years for the landfill is projected. We further understand that prior to the closure of the expansion area, the City and County will initiate the search for the next landfill. We request that greater specification be provided regarding the municipal solid waste plans and policies of the City and County, including alternative technology and waste reduction strategies and programs, beyond the projected life of the WGSL.</u></p>		<p><u>This comment is acknowledged regarding the inclusion of the appeals filed. See Section 2.5. Historical Background of the State Special Use Permit, of the Final EIS (FEIS) for this project.</u></p> <p><u>The City's Draft Integrated Solid Waste Management Plan was completed in June 2008 after the publication of the subject DEIS. We will provide further information concerning the municipal solid waste plans and policies contained in the draft document in the forthcoming FEIS for this project.</u></p>
<p><u>7.3</u> <u>In accordance with section 1 1-200-17(f), HAR, a separate and distinct section on alternatives which could attain the objectives of the action, including alternatives requiring actions of a significantly different nature, should be provided. At the LUC's March 6 and 7,2008, meeting on the deadline extension to accept solid waste at the WGSL, several commissioners noted that a district</u></p>		<p><u>This comment is acknowledged and will be addressed in the FEIS by indicating that both the filing of a new SUP application and/or a new Land Use District Boundary Amendment (LUDBA) application will constitute a viable means of addressing the use of the site for a municipal landfill. We add that the use of the site for landfilling purposes has been adequately and sufficiently addressed through the SUP filed for this project since 1989, when the site was opened for use.</u></p>

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<p><u>boundary amendment may be a more appropriate mechanism by which to seek the expansion of the WGSL rather than by an amendment to the existing special use permit (SUP). Accordingly, we request that the alternative of reclassifying the WGSL site from the Agricultural District to the Urban District be thoroughly addressed.</u></p>		<p><u>See Section 8.3. State Land Use Law, and Section 12. Permits and Regulatory Approvals That May Be Required, in the FEIS regarding the filing of a new SUP application and/or LUDBA application for this project.</u></p>
<p><u>7.4 In accordance with section 1 1-200- 17(h), HAR, the status of each identified approval should be described. Therefore, we request that to the extent possible the projected submittal dates (i.e., by month/year) of the various permit applications be provided.</u></p>		<p><u>The projected submittal dates for the land use entitlements and other pending permissions for the proposed project are not known at this time due to the pending EIS process that is currently underway. We can report, however, that as soon as practicable that these applications will be prepared and filed with the appropriate governmental agencies upon the conclusion of the current EIS process.</u></p>
<p><u>7.5 In accordance with section 1 1-200-1 7(i), HAR, the probable impact of the proposed action on the environment should be included. Review of the DEIS indicates that no inventory and assessment of arthropods on the 92.5-acre expansion area was conducted. Although the location of the subject property may not require that a comprehensive arthropod study be conducted, we request that this matter be addressed in the interest of full environmental disclosure.</u></p> <p><u>Additionally, a discussion on the existing civil defense conditions and potential impacts and proposed mitigation measures should be included.</u></p>		<p><u>This comment regarding arthropods is being investigated and will be addressed in the forthcoming project's FEIS in Section 5.9.4. Invertebrates, and Section 5.9.5. Potential Impacts and Mitigation Measures.</u></p> <p><u>The City Department of Emergency Management has been consulted concerning any civil defense related coordination that may be required. At this time the Department of Emergency Management has indicated no additional concerns or issues relating to the WGSL other than to note that the nearby location of the Battery Arizona site will not be used for public shelter given the condition of the facility. See attached Memorandum dated September 29, 2008.</u></p>
<p><u>7.6 In accordance with section 1 1-200-1 7(n), HAR, a separate and distinct section that summarizes unresolved issues should be included. To the extent that no decision has been rendered on the appeals filed by KOCA and Colleen Hanabusa to the decisions of the Planning Commission and the LUC in regard to the deadline extension, we request that they be identified as unresolved issues at this time.</u></p>		<p><u>This request is acknowledged. See Section 11. Unresolved Issues, of the FEIS which provides further information regarding this issue.</u></p>
<p><u>7.7 As you know, by Findings of Fact, Conclusions of Law, and Decision and Order Adopting with Modifications, the City and County of Honolulu Planning Commission's Recommendation to Approve Amendment to Special Use Permit issued on March 14, 2008, the LUC extended the deadline to accept solid waste at the landfill from May 1, 2008, to November 1, 2009, subject to, among other things, the requirement that the Applicant report to the LUC every six months on the actions taken to alleviate the further use of the WGSL. We acknowledge that the DEIS (p. 9-36) references the expansion of the H-POWER garbage-to-energy plant that was approved by the Mayor on January 18, 2008. However, we request that this discussion provide greater specificity to include, but not be limited to, the nature of the expansion, the capacity of the expansion, the life of the expansion, and its role in alleviating the further use of the WGSL.</u></p> <p><u>We also request that the discussion on the transshipment of waste and curbside recycling be updated with the latest efforts of the City and County to implement such alternatives to refuse disposal at the WGSL.</u></p>		<p><u>While the specific operational details of the planned H-POWER expansion project will be provided in the EIS documentation prepared for that project, we can provide information concerning the City's consideration of Waste to Energy (WTE) facilities in relation to handling the refuse needs of the Island of O'ahu. This information is provided in Section 2.6.2. Waste to Energy (WTE) Capacity, in the FEIS.</u></p> <p><u>Section 2.6.4. Waste Transshipment to the Mainland, in the FEIS, describes current efforts and the relationship between waste transshipment and the City's refuse management system.</u></p> <p><u>The DEIS has provided information on the latest efforts of the City in promoting recycling to reduce dependency on landfilling. See Sections: 9.5.6. Expanded Recycling; 9.5.6.1. Improvements to Recycling Infrastructure; and, 9.5.6.2. Recycling to Energy.</u></p>
<p><u>7.8 Condition No. 5 of the LUC's Decision and Order Approving Amendment to Special Use Permit (D&O Approving Amendment) issued on June 9, 2003, specified that the WGSL would be operational only between the hours of 7:00 a.m. and 4:30 p.m. daily. Clarification should be provided as to whether the current operational hours of the WGSL are proposed to be changed with its expansion.</u></p>		<p><u>The operational hours of 7:00 AM to 4:30 PM are not planned to be changed.</u></p>

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<p>7.9 <u>Condition No. 19 of the LUC's D&O Approving Amendment also specified that the City and County shall implement by executive order or ordinance measures for, among other things, wood recovery, metal recovery, gypsum recovery, and enhanced enforcement of landfill bans. Clarification should be provided as to the efforts of the City and County to comply with this condition.</u></p>		<p><u>In order to sustain a successful material recovery operation, the amount of material available at landfill was reestablished in the 2006 Waste Composition study. The total metals in the landfill waste stream have decreased. Gypsum board has decreased to less than one percent of the total waste or approximately 1,500 tons. In the area of wood, amounts have decreased to a little over ten percent, with treated wood making up over half of the amount of wood available. While it is possible to attempt to recover metals, gypsum board, and wood, the amounts being landfilled are not sufficient to sustain a cost-effective program.</u></p> <p><u>Actions that the City is currently supporting include the State Beverage Deposit law and focusing on enhanced enforcement of landfill bans. City staff are assigned intermittently to the landfill and H-POWER to ensure compliance with bans. If any vehicle is in violation of the bans, they receive a 'first warning.' If the vehicle returns with a banned material the hauling company is warned that if deliveries continue the company will not be allowed to dispose of waste at the landfill. Waste hauling companies that have been issued warnings have complied.</u></p>
<p>7.10 <u>In the DEIS, there are several references to the term potable water. We request that it be replaced by the term drinking water. We have been advised that although potable water has generally been used to mean drinking water, the Department of Health (DOH) uses the latter term specifically to indicate water for human consumption that is derived from surface water and/or groundwater and is regulated by the DOH pursuant to chapter 11-20, HAR.</u></p>		<p><u>We acknowledge your request and will augment the use of the term potable water as "potable/drinking water" in the forthcoming FEIS.</u></p>
<p>7.11 <u>We request that the EIS explicitly reference the applicable category of action within chapter 343, Hawaii Revised Statutes, and chapter 11-200, HAR, that triggered its preparation.</u></p>		<p><u>We acknowledge your request. See Section 3.2, Purpose of the Draft Final Environmental Impact Statement, providing this information.</u></p>
<p>7.12 <u>On page 8-12, the DEIS states that an SUP for the expansion of the WGSL must be obtained through the City and County of Honolulu. Notwithstanding the LUC's concerns about the appropriateness of an SUP in this matter, clarification should be provided as to whether the Department of Environmental Services intends to seek an amendment to the existing SUP or an entirely new SUP. Please be advised that in either case the LUC will have jurisdiction over the application in the event the Planning Commission recommends its approval. As such, Section 12 and other applicable sections within the DEIS should be revised accordingly.</u></p> <p><u>Finally, as part of the SUP process, the WGSL expansion is required to meet the SUP guidelines in determining an "unusual and reasonable" use in the Agricultural District pursuant to section 15-15 95, HAR. We believe that given the purpose of the EIS, it would be appropriate to specifically address said guidelines in the document.</u></p>		<p><u>At this time the City has not yet determined if it will file a new SUP and/or LUDBA for the proposed project. Section 12, Permits and Regulatory Approvals That May be Required, will be revised accordingly in the FEIS.</u></p> <p><u>As noted, while the preparation of a SUP and/or LUDBA has not been determined at this time, we acknowledge that the content of an SUP application when it is filed should meet the SUP guidelines and applicable regulations of law, and do not necessarily agree that this determination should be a part of the EIS process under Chapter 343, HRS.</u></p>
<p><u>8. Maribel M. Saelid</u></p>	<p><u>7/4/2008</u></p>	
<p>8.1 <u>The company that runs the Waimanalo Gulch Landfill has had serious, repeated violations and fines in the past. There is no reason to believe that these violations or more troubling violations won't occur in the future.</u></p>		<p><u>It is acknowledged that prior violations involving the State Department of Health (DOH) and the Environmental Protection Agency (EPA) have occurred in the past at the Waimānalo Gulch Sanitary Landfill. On December 7, 2007, a settlement agreement was reached with the DOH which settled all issues arising from and related to the notice of violation. At the present time the City and Waste Management of Hawai'i are fully cooperating and working with the EPA to address elevated underground temperatures at the landfill which are higher than anticipated, but which are not indicative of underground combustion conditions such as a fire. A detailed discussion of this item was provided in the DEIS, in Sections 2.3.2. U.S. Environmental Protection Agency and 5.7.3. Potential Impacts and Mitigation Measures (Air Quality).</u></p> <p><u>It is important to note that throughout the events involving the DOH and EPA that self-reporting procedures have remained in place to notify governmental regulatory agencies of the operating practices and procedures applied at the landfill. At no time was the health and safety of the public at risk, and we anticipate that based on these procedures, that sufficient safeguards will continue to maintain public health and safety.</u></p>

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<p><u>8.2</u> It is unfair and unjust to approve the expansion of Waimanalo Gulch Landfill without first implementing curbside recycling inclusive of, but not limited to, green compostable waste, glass, paper, newspaper, aluminum and cardboard. Diversion and waste to energy programs must occur prior to, or in conjunction with any expansion.</p>		<p>The City believes that curbside recycling, waste diversion, and refuse to energy are all important programs that will contribute to reducing our islandwide dependency on landfilling. However, these programs, including a number of other alternatives cited in the project DEIS, will not by themselves completely eliminate the need for a municipal sanitary landfill. For refuse that cannot be further recycled or otherwise reused, a landfill must continue to remain a key element of the City's refuse management system even as the City continues to explore, examine, and implement the waste diversion and refuse to energy systems that you identify.</p>
<p><u>9.</u> Kelvin H. Sunada, Manager Environmental Planning Office, Department of Health State of Hawaii</p>	<p>7/6/2008</p>	
<p><u>9.1</u> Any project and its potential impacts to State waters must meet the following criteria: Antidegradation policy (HAR, Section 11-54-1.1), Designated uses (HAR, Section 11-54-3), Water quality criteria (HAR, Sections 11-54-4 through 11-54-8).</p>		<p>This comment cites the water quality regulations of Hawai'i Administrative Rules, Section 11-54, Water Quality Standards, that apply to all projects in the State of Hawai'i.</p>
<p><u>9.2</u> You are required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for discharges of wastewater, including storm water runoff, into State surface waters (HAR, Chapter 11-55). For the following types of discharges into Class A or Class 2 State waters, you may apply for NPDES general permit coverage by submitting a Notice of Intent (NOI) form: Storm water associated with construction activities, Discharge of Hydrotesting water, Discharge of dewatering effluent. You must submit a separate NOI form for each type of discharge at least 30 calendar days prior to the start of the discharge activity, except when applying for coverage for discharges of storm water associated with construction activity. For this type of discharge, the NOI must be submitted 30 calendar days before to the start of construction activities.</p>		<p>This comment cites Hawai'i Administrative Rules, Section 11-55, Water Pollution Control, governing the requirements of the NPDES permit program in the State of Hawai'i. The ocean waters off of the proposed project site are designated as Class "A." This designation will require the filing of the NOI Form C, Construction Stormwater permit application which has been identified in Section 12, Permits and Regulatory Approvals That May Be Required.</p>
<p><u>9.3</u> For types of wastewater not listed in Item 2 above or wastewater discharging into Class 1 or Class AA waters, you must obtain an NPDES individual permit. An application for an NPDES individual permit must be submitted at least 180 calendar days before the commencement of the discharge.</p>		<p>Please refer to our comment above.</p>
<p><u>9.4</u> You must also submit a copy of the NOT or NPDES permit application to the State Department of Land and Natural Resources, State Historic Preservation Division (SHPD), or demonstrate to the satisfaction of the CWB that SHPD has or is in the process of evaluating your project.</p>		<p>We acknowledge the requirement that the SHPD be provided with a copy of the NOI Form C permit application for the proposed project.</p>
<p><u>9.5</u> At least 30 calendar days prior to the completion of the expansion, you must modify your NOI for storm water associated with industrial activity and Storm Water Pollution Control Plan to include the area of expansion and submit these documents to the CWB along with a \$500 filing fee.</p>		<p>We acknowledge this requirement for the approved existing NPDES NOI Form B permit for the Waimānalo Gulch Sanitary Landfill.</p>
<p><u>9.6</u> Please note that all discharges related to the project construction or operation activities, whether or not NPDES permit coverage and/or Section 401 Water Quality Certification are required, must comply with the State's Water Quality Standards.</p>		<p>We acknowledge your requirement.</p>
<p><u>9.7</u> The draft DEIS states that a landfill gas to energy system may be installed. If so, the installation of this system may require a modification to the existing Title V permit.</p>		<p>We acknowledge your requirement.</p>
<p><u>9.8</u> We recommend that the contractors operate under a dust control management plan. The plan does not require the Department of Health approval, however it will help with identifying and minimizing the dust problems from the proposed project.</p>		<p>We acknowledge the recommendation and note that the provision for dust control has been provided in the Operations Plan for the Waimānalo Gulch Sanitary Landfill, as submitted to the DOH.</p>

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<p>10. Peter Rappa, Environmental Review Coordinator University of Hawaii - Manoa Environmental Center</p>	<p>7/7/2008</p>	
<p>10.1 <u>Trying to determine the total picture of solid waste generation and disposal by looking at the various components is confusing. It doesn't seem to add up. Adding a discussion in Section 3 on the total amount of garbage collected, what goes into the landfill, what goes to H-POWER, what goes to green waste, and what is recycled would be helpful in understanding the magnitude of the problems and will aid in weighing the alternative waste strategies.</u></p>		<p><u>The Final EIS, Section 9.2.2. Composition of Waste Stream, will include tables to provide the information requested. The new tables will identify the amount of waste taken to Waimānalo Gulch and H-POWER, as well as an estimate of the amount of materials recycled. Tables will also be provided identifying the sector from which the waste was collected (residential and commercial), and the amount collected by the City and other waste haulers.</u></p>
<p>10.2 <u>In [the Environmental Compliance Violations] section, the DOH and EPA violation notices are listed. While the DEIS adequately discusses the measures that have been taken to address the violations, there is no discussion on why these violations occurred in the first place. Without a mention of this, the discussion of the retroactive measures taken to correct the violations seems incomplete.</u></p>		<p><u>Both the City and Waste Management of Hawai'i acknowledge that the alleged violations have occurred because of delays in implementing and reporting operational activities at the landfill. All of the allegations that were brought to light based on the operator's self-reporting practices were either corrected or were in the immediate process of being corrected (e.g., addressing the atypical temperatures at the landfill with the EPA) when the notices of violations were issued in early 2006.</u></p> <p><u>The primary corrective step that has been taken since that time has been to improve the timeliness of correcting and then reporting the required information to the DOH and EPA. The DEIS identifies the steps taken to help prevent a future occurrence in Section 2.3. Environmental Compliance Violations and Section 2.4. Summary of Current Status.</u></p>
<p>10.3 <u>The first full paragraph on page 3-6 contains the line "As an annual acreage, approximately 800 tons per day . . . or delivered." What has acreage to do with tonnage of solid waste? Was this a mistake or is there some formula for equating amount of waste delivered with the amount of land used?</u></p>		<p><u>Thank you for pointing out this typographical error. The correct entry that will be provided in the Final EIS will read, "As an annual average, approximately 800 tons per day...."</u></p>
<p>10.4 <u>The final line in the section of the DEIS dealing with final covering of the landfill states that the "site may request the DOH permit alternative cover in lieu of the Subtitle D prescriptive cover described above." What are other types of covering contemplated? Does the City and County have anything else in mind? If so, shouldn't they be discussed in the DEIS? Does Subtitle D allow for alternative covers for the landfill?</u></p>		<p><u>RCRA, Subtitle D, allows for the use of alternative cover. The alternative cover that is being considered involves a thicker soil cover to handle the root systems of the types of trees being considered at the landfill. The tree types being contemplated will be similar to those found on the surrounding terrain. Native or other trees with a long tap root will not be used. Also, boulders may be added to enhance the appearance of the site.</u></p>
<p>10.5 <u>How much waste is usually excluded per day under the Unacceptable Waste Exclusion Program?</u></p>		<p><u>This waste amounts to less than 1 percent of the refuse disposed of at the landfill.</u></p>
<p>10.6 <u>In the management of unacceptable waste, hazardous waste is stored in a temporary storage area for 90 days after the accumulation of 220 pounds or more. What happens to the hazardous waste after the 90 day period expires? Why wait 90 days after it reaches 220 pounds, why not just dispose of it then?</u></p>		<p><u>Waste identified as "hazardous" is collected for temporary holding in a specially designated site that is designed to contain the waste and prevent exposure paths to the environment. A typical hazardous waste item for example, is a car battery. The reason for the safe storage of this type of waste prior to removal to an approved disposal facility is to minimize the number of trips involving the transport of these types of materials.</u></p>
<p>10.7 <u>What does the groundwater and gas monitoring consist of? Are they devices that are placed in the ground that detect gas and record the data on graph paper? Are they gauges that are periodically read? How is monitoring carried out?</u></p>		<p><u>The groundwater and gas monitoring systems consist of the use of subsurface wells for the collection of samples. Sampling of these wells are by trained third party personnel who collect the samples according to industry standard practices that involve chain of custody, quality assurance/quality control procedures, and other protocols that govern the length of time and conditions under which a sample is collected prior to analysis. The samples are submitted to a laboratory certified by the State DOH. The results of all analyses, including the supporting documentation establishing that the samples were collected properly are provided in a report that is submitted to the DOH.</u></p>
<p>10.8 <u>In Section 4.6.1 the DEIS mentions that the landfill stormwater management system is designed and constructed to manage runoff from a 25-year, 24-hour storm. What about a 100-year storm? How did the site fare during the January 2007 rain events?</u></p>		<p><u>The 25-year storm was used as an industry safety standard that was compliant with the City & County of Honolulu. The handling of stormwater for a 100- year storm event would involve considerable retention and drainage system sizing requirements that are not considered feasible or reasonable for the WGSL. The performance of the WGSL during the January 2007 rain events were satisfactory and provided for the sufficient control and treatment of stormwater runoff.</u></p>

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<p>10.9 <u>In the section on landfill gas temperatures, it is mentioned that WGSL has temperatures exceeding the EPA specified maximum temperature. Other approved mainland landfills with temperatures exceeding EPA limits are then listed. Absent from this discussion is a mention of the actual temperatures found at WGSL.</u></p>		<p><u>The wells with temperatures above the EPA's standard operating temperature of 131° Fahrenheit average approximately 165° F. One well has had an isolated temperature reading of 184° F, which is the highest recorded temperature of any well at the landfill. This information has been submitted to the EPA.</u></p> <p><u>See Section 5.7.3. Potential Impacts and Mitigation Measures, of the FEIS relating to landfill gas emissions, relating to a discussion on the LFG (landfill gas) Collection System, providing this information.</u></p>
<p>10.10 <u>The DEIS states that hydromulching has not been very successful on top of the filled areas due to dry conditions at the site. The DEIS continues by stating that landscaping and the further use of irrigation will promote vegetative growth similar to that found on the adjoining hillsides. Can you provide more details on why there has been little success with revegetation, and how new action plans will remedy this?</u></p>		<p><u>The initial difficulty with vegetative growth involved the dry and low rainfall conditions of the Leeward side of O'ahu. The sporadic level of rainfall received at the site was simply not conducive to growth. The new plan will address this constraint by selectively targeting smaller portions of the site with as many "targets" as can be provided while meeting the water conservation requirements of the Board of Water Supply.</u></p> <p><u>An important feature of the plan is to more efficiently use irrigation while recognizing that the contours of the landfill are subject to change as various portions of the site are filled. Landscaping will therefore follow the filling of the cells. In order to do so, the new system will employ a central trunk water line that will run across the slope of the landfill and use perforated feed lines that run from the central trunk line. We expect that this will constitute an improvement over the prior practice of using rigid perforated water hoses that were prone to breakage whenever it was necessary to move or relocate the water hoses.</u></p>
<p>10.11 <u>In this section the DEIS states "For several years, Hawai'i residents have responded to polls on the major issues facing the community by pointing to the economy and education as the most important issues for the State (Figure 7-1). Environmental issues . . . do not achieve the same salience." Figure 7-1 illustrates the relative expressed importance of the economy, education, traffic, housing, and drugs, but the issue of then environment does not appear at all. Is this because Hawai'i residents were not given the option of choosing the environment as an issue (a structured poll), or because it was mentioned so infrequently that it would not show up on the graph?</u></p>		<p><u>The question that was posed to those interviewed was open-ended allowing them to select the environment if they chose to do so. While SMS Research has noted that the environment is becoming of increasing concern to Hawaii residents it does not come up in numbers that exceed one to five percent of the population.</u></p>
<p>10.12 <u>The DEIS states that the value of the community benefits were identified as \$2.7 million in 2007 and \$2.0 million in 2008. While the specific benefits that will be distributed in the future have not yet been determined, can you provide more detail on the benefit packages provided in previous years?</u></p>		<p><u>The community benefits initiative is a new program that was started by the current City Administration. Prior to 2007, there were no community benefits initiatives associated with the project.</u></p>
<p>10.13 <u>There are a number of technology driven options examined in the first half of the lengthy discussion of alternatives. Each of these is evaluated as an all or nothing choice. There is no reason why several options might be considered in tandem that could address the need for the City and County to address its solid waste situation.</u></p> <p><u>Some of these methods taken together could lead to the closure or at least lead to a drastic reduction in the use of the landfill. There is also incomplete information about the cost of each of these options. Could not reasonable estimates of cost be found so that the options could be compared?</u></p>		<p><u>The alternative technologies to landfilling provided in the DEIS have been used in sizes smaller than noted. The size used in the DEIS was as specified by the City to define the project types that would be considered in its Invitation for Bid (IFB) for alternative technology. The Final EIS will provide discussion of the use of multiple smaller technologies. See Section 9.6. Alternative Technologies to Refuse Disposal, subsection 9.6.1. Introduction.</u></p> <p><u>Concerning the cost of the technologies, many of the alternatives evaluated have not had a full scale project built. Some have. To compare the cost of these two disparate conditions would result in an inaccurate and unfair evaluation. In addition, site specific factors must be reflected in the cost of a facility and those need to be estimated based on preliminary engineering data that was unavailable for most of the technologies.</u></p>
<p>11. <u>Colleen Hanabusa, Senator, 21st District</u> <u>The Senate</u> <u>State of Hawaii</u></p>	<p>7/7/2008</p>	
<p>11.1 <u>Section 2 Project Background -- This section begins with the incorrect conclusion that WGSL is 'essential and necessary' for the City and County of Honolulu ('City'). WGSL is deemed to be essential and necessary only because no action has been taken by the City in truly exploring alternatives to landfilling on this island.</u></p>		<p><u>The City is responsible for providing for the disposal of waste materials. Currently the primary disposal methods in use are recycling, landfilling and incineration. As explained in the DEIS, WGSL is the only currently permitted municipal solid waste ("MSW") landfill on Oahu. Any alternative landfill location other than Waimanalo Gulch will take time to select, acquire and permit. H-POWER handles the majority of the MSW that is disposed on the island. Waimanalo Gulch provides disposal capacity for the ash and residue from H-POWER and is a permitting requirement for H-POWER to operate. Since the Waimanalo Gulch is the only currently permitted MSW landfill and since H-POWER is required to take ash and residue to a permitted landfill, the Waimanalo Gulch Sanitary Landfill ("WGSL") is "essential and necessary."</u></p>

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<p>11.2 <u>An honest discussion is lacking in the DEIS as to why the City delayed in bringing the expansion to the public. News media reports of comments by the Planning Commission of the City and County (‘PC’) and the Land Use Commission (‘LUC’) evidence that these decision makers were also not pleased with what could be construed as a deliberate delay to request the extension. This expansion request will also be construed as leaving decision makers no alternative but to grant an extension.</u></p>		<p><u>On June 9, 2003, the LUC issued its Decision and Order Approving Amendment to Special Use Permit (“2003 LUC Decision”). The City was ordered by the LUC to select a new site by June 1, 2004. The Mayor’s Advisory Committee on Landfill Siting (“Mayor’s Advisory Committee”) was formed in June 2003 by Mayor Harris to make a recommendation to the City Council as to a new site for the landfill. The Committee issued a list of 4 sites for City Council consideration on December 1, 2003, in accordance with Condition No. 1 of the 2003 LUC Decision.</u></p> <p><u>The City Council conducted an independent evaluation of the selection process used by the Committee, and determined that it was unable to make a decision by the LUC’s June 1, 2004 deadline. The City was granted a 6-month extension, to December 1, 2004, to make a decision on a new landfill site.</u></p> <p><u>The City also sought the LUC’s clarification as to whether Waimanalo Gulch could be considered by the City Council as the future landfill site. The LUC stated that such a decision was not within its jurisdiction. Accordingly, Waimanalo Gulch was then considered as a potential landfill site by the City Council. The City Council selected Waimanalo Gulch as the future landfill site on December 1, 2004.</u></p> <p><u>The current City administration took office in January 2005 and immediately began a review of the options for MSW disposal. This process took about a year to conclude. By early 2006, the City decided to proceed with the environmental review process for the future use of Waimanalo Gulch. In February 2006, the City Council passed Council Bill 37 (2005), CD2, which would have closed WGSL by May 1, 2008. Bill 37 was vetoed and the environmental review process for expansion of WGSL began in 2006. The EIS Preparation Notice was published in The Environmental Notice in November 2006.</u></p> <p><u>Stone uprights were identified in the proposed expansion area in the Spring of 2007. Due to a staff shortage at SHPD, the evaluation of the cultural significance of the stones was delayed. Because a cultural impact assessment is required in an EIS, completion of the EIS was delayed. Additionally, the City has been in the process of seeking to increase waste-to-energy capacity as an alternative to landfilling and to transship refuse to be landfilled on the mainland. In both cases, the results to date have been reflected in the DEIS.</u></p> <p><u>Because it was clear that given the delays related to evaluation of the stone uprights the City would be unable to complete the EIS and receive the proper permits before the May 1, 2008 deadline for cessation of waste acceptance at WGSL, the City sought a 2-year extension based on the fact that there was additional unused capacity. Ultimately, an 18-month extension was granted.</u></p>
<p>11.3 <u>Blue Ribbon Commission - Much of this DEIS is based upon the Mayor’s Advisory Committee on Landfill Site Selection (‘Blue Ribbon Commission’). What the DEIS fails to address is that this Blue Ribbon Commission, having been staffed by R.M. Towill provided the members with inadequate information or incorrect information to fulfill their task.</u></p>		<p><u>The process followed by the Mayor’s Advisory Committee is detailed in the EIS. The Mayor’s Advisory Committee’s recommendations were made based on its own selection of criteria it considered important to the selection of an alternative landfill site. R. M. Towill supported by Pacific Waste Consulting Group, SMS Research, Cultural Surveys Hawai’i, and the City gathered the information requested of it by the Committee.</u></p> <p><u>Site specific information was sought in a number of instances, but access to some of the potential sites was either denied or delayed (until late in the LUC timetable) by the landowners of four of the five sites. As a result assumptions that were shared with the Committee were made to enable a reasonable comparative analysis.</u></p> <p><u>Although there was significant technical data about WGSL available, in order to put all of the sites on an equal level for comparison, the “no excavation” assumption and other assumptions were used for the evaluation. These assumptions were documented in the data sheets that were provided to the Committee.</u></p>

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<p>11.4 <u>Though much is made about violations of the Sunshine law, what is lacking is an honest discussion of the flawed information which was provided to the Blue Ribbon Commission. Response by the City that R.M. Towill is not expected to know what the conditions of the land is absolutely laughable. The entity which has prepared all EISs in recent history and who is well aware of the Contract entered into to extend the management contract with Waste Management Hawaii, Inc. ('WMI') for the landfill operations at WGSL, cannot argue ignorance. It is of significance that the City finally admits that one of the criteria to assess the sites was no excavation. How R.M. Towill or the City could present WGSL expansion for 20 years with no excavation is akin to bad faith. The City and R.M. Towill was definitely on notice and failed to inform the Blue Ribbon Commission of this fact.</u></p>		<p><u>This comment regarding the City's contract with Waste Management of Hawaii, Inc. ("Waste Management"), and the comment regarding "no excavation", are similar to comments made in earlier letters from you dated August 30, 2006 and December 26, 2006. We offer the following response, which is consistent with earlier responses:</u></p> <p><u>The contract amendment dated May 1, 1999, provided for the expansion of the Waimanalo Gulch site. Subsequently, the prior administration decided on a five-year limit for the use of the site. The contract was not amended to a shorter term because the exact date of termination could not have been determined. Although the contract was not amended, the City retains control of the contract and can terminate it at any time when it is in the best interest of the City. As provided in Contract Special Provision 29, the contract can be terminated, "... in whole or in part, whenever the Director shall determine that termination of the contract, in whole or in part, is in the best interest of the City." (Letter to Colleen Hanabusa from ENV, May 12, 2008)</u></p> <p><u>Waste Management, consultants, and the City all understand this provision. The contract is a publicly available document.</u></p> <p><u>Regarding "no excavation": The no excavation remark that you cite comes from the Waimanalo Gulch Expansion, Potential Landfill Site Data Sheets, prepared for the Mayor's Advisory Committee on Landfill Siting, October 2003.</u></p> <p><u>The specific reference is to information provided for Criteria No. 23, Landfill Capacity or Site Life. According to the data sheet, "The volume was calculated assuming a 100 foot buffer around the site boundary, 30 acres for infrastructure facilities, no excavation, and filling to the natural grade." The rationale for not incorporating excavation as a factor involved the following:</u></p> <p><u>A. It was not in the consultant's scope of work to do field studies including drilling borings to obtain subsurface information. This is typically the case when doing preliminary siting studies due to difficulty in gaining access to the property, the extensive time required for such studies, and the high cost of doing field studies. Without these studies, it is not possible to determine excavation depths or difficulty with any degree of certainty. Therefore, it is typical to assume minimal or no excavation in order to compare site capacities:</u></p> <p><u>B. Criteria No. 23, therefore, was established to provide an estimate of capacity only based on: an area adjusted with an approximately 100 foot buffer around the perimeter of the site; the use of 30 acres for infrastructure to operate the facility; no detailed engineering calculations incorporating soils conditions to produce information on excavation; and filling of the site to the natural grade of the terrain of the finished site. It is incorrect to conclude or imply on the basis of information from the data sheet alone that in the course of developing a landfill site that no excavation would be required.</u></p> <p><u>See Letter to Colleen Hanabusa from ENV, May 12, 2008.</u></p>
<p>11.5 <u>The Contract between WMI and City should be made a part of the Appendices for the Final Supplement EIS to be accurate and complete.</u></p>		<p><u>The contract between the City and Waste Management is a matter of public record and is publicly available for those who may wish to view it. The absence of the contract in the Appendices will not affect the accuracy, nor completeness, of the EIS.</u></p>
<p>11.6 <u>In addition, the Appendix which is found in Volume 3 of 3 fails to include those pages which address the criteria as well as how the alternative sites were evaluated by R.M. Towill. This should definitely be included for all to review.</u></p>		<p><u>The full Report of the Mayor's Advisory Committee (Blue Ribbon Committee) on Landfill Site Selection dated December 1, 2003, which addressed the 31 criteria used by the Mayor's Advisory Committee as well as how alternative sites were evaluated, is attached as an exhibit to Appendix K of the DEIS, and located on the City's website at http://www.opala.org/solid_waste/archive/Mayor%27s_Advisory_Committee_on_Landfill_Siting.html. Additionally, a description of the criteria and evaluation process is located on pages 9-51 to 9-73 of the DEIS.</u></p>
<p>11.7 <u>Under Section 4 of this letter, there will be a discussion of the costs. Cost which was a criteria for the Blue Ribbon Commission had very minimal expenses for WGSL because of the lack of excavation. This is again shown to be an incorrect statement.</u></p>		<p><u>Costs are addressed below in responses to comments 35 and 36.</u></p>
<p>11.8 <u>DOH Violations - The so called alleged efforts of the City to address the Department of Health's Notice of Violations (NOV) and how to prevent them in the future need more details. This is especially true in light of the subsequent allegations of mismanagement and the recent lawsuit regarding the City's rebate of tipping fees to Schnitzer steel.</u></p>		<p><u>As a result of the NOV, and new regulations and requirements, additional provisions were included in the revised landfill operating permit. Furthermore, the Department of Health, State of Hawaii ("DOH"), has greatly increased the frequency of its site inspections and review of the required operating documents.</u></p>

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<p><u>What is of significance is the issue of what is the City doing to monitor what is being placed in the landfill. It is also important that irrespective of whether the violations were 'settled,' there is still lacking information as to how and where the asbestos was buried. This is hidden in the violations regarding the reporting to the DOH.</u></p>		<p><u>Finally, City staff is in constant contact with Waste Management and addresses issues that may arise on a daily basis. City staff does an initial screening of what is being placed in the landfill when the delivery vehicle is at the scale house. Waste Management does further screening as the waste is disposed of at the working face of the landfill. The City co-authors or receives copies of all reports submitted to DOH.</u></p> <p><u>The allegations in the Schnitzer Steel lawsuit – to which the City is not a party – have yet to be proven, and in any event, Schnitzer Steel provides annual certification that the recycling residue in question meets all legal requirements for landfill disposal.</u></p> <p><u>Asbestos is handled in accordance with Part II, section C, of operating permit dated February 20, 2008, which is publicly available.</u></p>
<p><u>11.9 The exceedance of grade is a critical issue as to future monitoring and there needs to be a more detailed discussion as to how this will be avoided in the future.</u></p>		<p><u>After extensive review and a stability analysis, DOH approved the grade modification to WGSL. A ground survey is performed on a bi-monthly basis to compare existing grades with approved grades. DOH is responsible for enforcement at the site and determines the frequency of its inspections.</u></p> <p><u>See also Section 2.3.1. State Department of Health of the FEIS, for further discussion.</u></p>
<p><u>11.10 EPA Violations - It is unacceptable to merely address these violations as "resolution pending." In light of this Department and the City's battles with the EPA on the sewer systems, it is important to cover in this DEIS the relationship between the two, if any.</u></p>		<p><u>The primary violation in the EPA Finding and Notice of Violation ("EPA NOV") was the late installation of the gas collection system, which was self-reported. It was installed and operational by November 2005. Subsequently, the EPA issued its NOV in April 2006. Thus, what led to the initial violation was corrected. In addition, EPA alleged that the WGSL continues to operate in violation of EPA regulations because the WGSL's wellhead gas temperatures exceed 131°F in some of the landfill gas wells.</u></p> <p><u>Waste Management continues to monitor and evaluate the potential causes of the elevated gas temperatures and has provided documentation to EPA and DOH to demonstrate that the Landfill can be safely operated at these higher temperatures. Waste Management will continue to coordinate appropriate measures to maintain compliance with all regulations as required by law.</u></p> <p><u>There is no relationship between this EPA NOV and the City's sewer systems. See also Section 2.3.2. U.S. Environmental Protection Agency, of the FEIS.</u></p>
<p><u>11.11 More importantly, what is lacking is a discussion as to what the City has done in terms of contract evaluations and performance evaluations of its operator, WML. Given the nature of their violations and the magnitude, the DEIS is required to provide this information to the public.</u></p>		<p><u>To evaluate operations performance, the City hired a third-party engineering consultant to evaluate landfill operations. They concluded that Waste Management was performing at a satisfactory level. Waste Management also contracted with another third-party engineering consultant to evaluate the effect landfill operations may have on neighboring areas and has shared data with the City. The City's staff meets weekly with Waste Management's staff to discuss landfill operations. In addition, the City's Refuse Disposal Engineer is in daily contact with Waste Management's General Manager regarding operations at WGSL.</u></p> <p><u>See also Section 2.4. Summary of Current Status, of the FEIS.</u></p>
<p><u>11.12 Section 3 Introduction - This introduction is lacking in that it fails to set forth that this is a project which was promised to be closed by the prior administration and this Mayor as well.</u></p>		<p><u>The City acknowledges that prior commitments were made by previous administration officials to close WGSL by 2008. See also pages 2-2 and 2-3 of the DEIS. This position was overridden by the subsequent City Council selection of WGSL as the location of the City's future landfill as described in section 2 of the DEIS. The City is unaware of any commitment by the current administration to close WGSL.</u></p>
<p><u>11.13 Moreover, in that the City has chosen to address the requirements of a DEIS in this section of its document, it should be clear as to exactly what is required, such as: Department of Health Rules ('HAR') § 11-200-14 through 23 are the requirements in the preparation of Draft and Final Environmental Impact Statements. The 'General Provisions' highlight the expectation of the EIS process.</u></p> <p><u>... An EIS is meaningless without the conscientious application of the EIS process as a whole, and shall not be merely a self-serving recitation of benefits and a rationalization of the proposed action. Agencies shall ensure that statements are prepared at the earliest opportunity in the planning and decision making process. This shall assure an early open forum for discussion of adverse effects and available alternatives, and that the decision makers will be enlightened to any environmental consequences of the proposed action.</u></p>		<p><u>The DEIS was prepared in accordance with Hawaii Revised Statutes ("HRS") Chapter 343 and Title 11, Chapter 200, of the Hawaii Administrative Rules ("HAR"). The environmental review process allows for public input, such as your letter, which benefits the integrity of the review.</u></p>

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<p>11.14 <u>Clearly, this DEIS is a self serving recitation and a rationalization of what the City wants to do. The Rules require that these statements be prepared at the earliest opportunity and it is evident that the City chose to wait until the last possible moment. The argument which the City will raise is the discovery of stone outcroppings. However, the City chose to file this DEIS without a determination by the EPA on the violations at WGSL. When it has been convenient, the City has chosen to act so that there is no time for any viable alternative.</u></p>		<p><u>See the response at pages 1-2 of this letter regarding the EIS process and timeline. A cultural impact assessment is a necessary component of an EIS in accordance with Hawaii law. This assessment could not be completed until the cultural stone uprights were evaluated. This evaluation and the cultural impact assessment have been completed, however, the final preservation plan for the stone uprights is currently being developed, and has therefore, been identified as an unresolved issue in Section 11 of the DEIS. The City, Waste Management and SHPD will work to ensure that an appropriate preservation plan is put into place.</u></p> <p><u>Resolution of the EPA NOV is not required to complete this DEIS. The EIS is an informational document and provides the current status of the EPA NOV. It cannot predict the resolution of the EPA NOV. The City did not wait for completion of the negotiations with EPA to complete the EIS as doing so would have further compressed the schedule. The EPA operates on its own schedule.</u></p>
<p>11.15 <u>Figure 3-2 in this section depicts expansion which will exceed the present SUP boundary. This means that the expansion is expected on the lower portion of WGSL nearest Farrington Highway which will make the landfill more visible to the residents. This expansion will take all of the 200 acres at WGSL minus a 100 foot barrier around the perimeter of the property boundary.</u></p>		<p><u>The extent of proposed landfill expansion area is shown in Figure 3-2, Figure 4-6, Figure 5-1 and Figure 5-3 of the DEIS, and these figures show that expansion will occur mauka and northeast of the currently permitted area. The area south of Ash Cells 1 and 8, which you referred to as the "lower portion of WGSL nearest Farrington Highway," is currently permitted for facilities, but not for landfilling. That area is already a part of the permitted footprint and is expected to continue to be used for facilities.</u></p> <p><u>The lower portions of the expansion area, as depicted on Figure 3-2 will be used for accessory uses, not landfilling. See also Figure 4-6 (Approximate Final Grading Plan and Proposed Stockpile Location). Surface treatments including landscaping will be done to improve the appearance of the site.</u></p>
<p>11.16 <u>Section 4 Project Description - It is interesting that the City refuses to acknowledge that WGSL is located near Ko Olina. Ko Olina has a community and is marked as the Second Resort destination for the Island of Oahu. In these difficult economic times, it would be significance to know that location of the landfill to a major economic engine for the City and the State of Hawai'i.</u></p>		<p><u>The DEIS clearly shows the location of Ko Olina and its proximity to WGSL in Figures 7-3, 7-4, and 7-5. Section 7.2., Land Use and Ownership, clearly acknowledges the presence and importance of Ko Olina as one of several regional land uses in proximity to WGSL.</u></p>
<p>11.17 <u>Given that there has been a contested case hearing recently completed on the WGSL, it is of interest that the sworn testimony of the City officials are not included in some form or another.</u></p>		<p><u>The transcript of the Contested Case Hearing is a publicly available document. It is not necessary to recite or attach the transcript to the EIS. However, where your comment misstates testimony, the corrections are noted below.</u></p>
<p>11.18 <u>For example: Frank Doyle testified that he was Chief of the Division of Refuse when WGSL was initially selected. He confirmed that the original Environmental Impact Statement ('EIS') stated that only 59 or 60 acres was suitable for landfill use. (For ease of reference, the "Tr." refers to the transcript in the Contested Case Hearing held on December 7, 2007, followed by the page numbers Tr. 215 and 217).</u></p>		<p><u>Mr. Doyle testified that the first EIS contained a reference that WGSL contained "59, 60 [acres], somewhere in that area" of land good for landfilling. See Transcript at 217. Please also refer to comment 29 below.</u></p>
<p>11.19 <u>You, [sic] Mr. Takamura testified that to expand WGSL under the 17 year contract with WMI, 8 million cubic yards of native soil will have to be removed to create 15 million cubic yards of airspace (landfill). (Tr. 67-68).</u></p>		<p><u>Dr. Takamura testified that it sounded familiar that 8 million cubic yards of native soil will have to be removed to create 15 million cubic yards of airspace. See Transcript at 68.</u></p>
<p>11.20 <u>WGSL is up the side of a mountain. In the present expansion of WGSL by the 14.9 acres, WMI encountered blue rock and has been blasting to expand WGSL. (Tr. 177-178). Paul Burns, former manager of WMI for WGSL, testified that grading has been done at WGSL which is outside the permitted 14.9 acres and is where blue rock has been encountered. (Tr. 149). It is for sloping of rock faces and drainage. (Tr. 150). In the E-3, E-4 area as much as 700,000 cubic yards of blue rock was removed. (Tr. 152-153).</u></p>		<p><u>Mr. Burns testified that drainage, grading and sloping of rock faces for safety reasons has occurred outside of the 14.9 acre expansion area designated for landfilling. See Transcript at 150. Mr. Burns also testified that rock "probably in the 700,000 cubic yard range" was removed from Cells E-3 and E-4. See id. at 152-53.</u></p>
<p>11.21 <u>At the landfill, leachate is created. Leachate is "the decomposition of organic matter . . . produces CO2; if it's anaerobic, it produces methane, and the other end product is water. There's also water in -- loose water with the material we grab or dispose of, so when it decomposes and breaks down, water seeps to the bottom . . . where the liner is and it collects there. . ." (Tr. 71).</u></p>		<p><u>Dr. Takamura testified as follows: In the decomposition of organic matter, I guess the biological activity produces CO2; if it's anaerobic it produces methane; and the other end product is water. There's also water in -- loose water with the material we grab or dispose of, so when it decomposes and breaks down, water seeps to the bottom of the -- where the liner is and it collects there and it goes to the low point, and that's what we term "leachate." See Transcript at 70-71.</u></p>

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<p><u>11.22</u> Count I of the NOV is entitled 'Exceedance of Permitted Grades' and is relevant to the representation of the capacity at WGSL. (Id. at 2). In Count I and as testified to by Burns, permitted capacity in the ash monofill area was filled and exceeded in 2004 by 100,000 tons. (Tr. 168).</p> <p>In addition, 129,200 cubic yards of Municipal Solid Waste ('MSW') was placed above permitted grades. This computes to about 91,000-100,000 tons. (Tr. 168-169). When the DOH learned of these violations, it had originally told WMI to re-grade the ash monofill area and remove the excess MSW to the back portion of the landfill. (Tr. 248). An alternative provided to WMI was to construct the berms to address the stability issue. (Tr. 250).</p>		<p>Paragraph 9 of Count I of the DOH Notice and Finding of Violation (NOV) provides, "In a letter dated February 3, 2005, Waste Management states 'approximately 100,000 tons of ash delivered from the H-POWER facility has been placed above the current permitted grades of the ash monofill'. The February 3, 2005 letter further states that the placement of ash occurred during 2004."</p> <p>Mr. Burns testified that he was unable to answer whether 100,000 tons of ash had been placed above current permitted grades in the ash monofill because that was before he arrived in Hawaii. See Transcript at 167-68.</p> <p>Paragraph 11 of Count I of the DOH NOV provides, "With a submission dated February 22, 2005, showing 2005 topography and master plan final grades, Waste Management noted that 139,485 cubic yards of ash and 129,240 cubic yards of MSW were placed beyond the permitted grades."</p> <p>As to paragraph 11 of Count I of the DOH NOV, Mr. Burns testified that 130,000 cubic yards was "about 91,000 tons, about there, 90-something thousand?". See Transcript at 168-169.</p> <p>Gary Siu of DOH testified that DOH asked Waste Management and/or the City to regrade the ash on the Waianae side, and to remove the overfilled area in the MSW area and take it to areas with capacity. See Transcript at 248. Regarding the berm, Gary Siu testified, "The construction of the ash -- the berm to stabilize the ash was done -- because when they told us that they overfilled it, I believe there's a letter signed by Larry Lau putting some options in front of them, and the option they chose was to build a stability berm." See Transcript at 250.</p>
<p><u>11.23</u> A 'toe berm' was constructed at the 'toe' of the ash monofill when Takamura was Director to address the overall stability of the WGSL. (Tr. 56 and 58).</p>		<p>Dr. Takamura stated that Colleen Hanabusa should ask the engineers about the purpose of the toe berm. See Transcript at 56. He testified that he understood that his approval was needed for the construction of the toe berm because "it's part of the operations of the Waimanalo Gulch landfill." See id. at 57. Dr. Takamura further testified that the toe berm was already being constructed prior to a meeting with DOH regarding the NOV. See id. at 58. He believed that there had been discussions about stability prior to his meeting with DOH. See id.</p>
<p><u>11.24</u> Takamura testified that stability issues are common when you touch a slope and WGSL is up the slope of the mountainside. (Tr. 60). Burns conceded the stability concerns and described WGSL as a canyon and once the valley is filled (the gulch) then when the expansion is upward, there is an effect throughout the whole facility. It is similar to stacking on the top and the effect will be there for the lower area. (Tr.159- 160).</p>		<p>It is unclear what "Burns conceded the stability concerns" means. Specifically, Mr. Burns testified, "As you mentioned earlier, we've got a canyon fill or a valley fill, and that valley, it's a 'V' shape, in very simplistic terms a 'V'-shaped gulch and it's not flat, it kind of points uphill; so, whatever you do on the upper reaches has an effect, pretty much through the whole facility..." See Transcript at 158-59.</p> <p>In response to the question "[B]ecause of what I consider the stacking -- just a layman person's perspective -- stacking of the MSW and the landfill that you -- that the decision was made that at the ash monofill, the bottom area, that the height should be reduced for stability?," Mr. Burns testified, "They all kind of go together." See id. at 159.</p>
<p><u>11.25</u> Due to the topography of WGSL, there are three stability berms. One is for the ash monofill area and called the 'toe berm.' The others are the E-1 berm and the West berm. (Tr. 151). The E-1 berm was constructed in late 2005 to 2006 and the West berm in 2006-2007. (Tr. 164). All three berms were constructed with blue rock from primarily the E-3 cells. (Tr. 177-178). The West berm was constructed to stabilize the landfill as the east side (E cells) are being filled. As the east side fills the forces push the to the west side. (Tr. 254). These berms were stability berms which were a result of WMI overfilling WGSL. (Tr. 267).</p>		<p>Mr. Burns testified that he believed the E-1 berm was built in late 2005, maybe into 2006. See Transcript at 164. Mr. Burns also testified that the western berm was constructed with blue rock, that the toe berm was constructed with blue rock which primarily came out of Cell E-3, and that he was unsure where the material to construct the E-1 berm came from. See Transcript at 177-78.</p> <p>Mr. Siu testified, "As you fill the east side, the force is pushing on the west side." See id. at 254. In response to the question, "So, the stability berm is the ones that came in 2005?," Mr. Siu stated, "That's correct. And they're not a part of a permit application; they're part of a response to overfilling the landfill and potentially making a site unstable, which is what their analysis showed." See id. at 267.</p> <p>Regarding Mr. Siu's comment, the City clarifies that only the ash toe berm was added to address an isolated low factor of safety in some portions of the ash monofill caused by overfill. The E-1 berm and West berm were a part of the initial design for the 14.9-acre expansion of WGSL, and were not added at a later date to address an unanticipated low factor of safety.</p> <p>It should also be noted that Mr. Siu testified that he was not an expert on stability analysis and did not conduct his own stability analysis of WGSL. See id. at 260-261.</p>
<p><u>11.26</u> There needs to be a description of safety factors. For example the testimony has been: Safety factor at WGSL is calculated at 1.5; however anything above it is acceptable. (Tr. 172). The example given is that in the E-1 area the safety factor is less than 1.5; however the addition of the berm brings it up to 1.5. (Tr. 173). The safety factor affects the grades at the landfill.</p>		<p>Mr. Burns testified that Hawaii has a minimum safety factor of 1.5, and that anything above 1.5 is acceptable. See Transcript at 171-77. Mr. Burns provided a hypothetical example, "So, if we do a design without, say--for example, without a stability berm, in the E-1 area we may have a factor of safety below 1.5; it could be 1.4. You add that stability berm in place, it -- you know, it boosts your factor of safety to the 1.5. It just gives you that extra level of insurance." Id. at 173.</p>

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<p><u>For example if the factor was 2.0, the grades would need to be lowered. (Tr. 185). The stability factor at the ash monofill area before the toe berm was 1.29. (Tr. 248). A related issue is that WMI had used the wrong liner in that the 'textured liner' was not used and a 'smooth' liner was which called into question the resistance to movement of the landfill. There were at least two cells in the middle of the landfill with smooth liners. (Tr. 134).</u></p>		<p><u>Mr. Burns testified that if 2.0 was the factor of safety, it may affect WGL's final grades or future designs. Id. at 185. He testified, "They would need to be lower, probably," and "There's some areas it would have no effect on; other areas it may have some effect." Id. at 185-86.</u></p> <p><u>Mr. Siu testified that he thought the factor of safety was 1.29 with the overfill in the ash area. Id. at 247-48.</u></p> <p><u>As to the liner issue, Mr. Burns testified as follows:</u></p> <p><u>So, during -- in 2001, while we were doing the design of the 14.9 acre expansion, we realized there were some cells constructed in the middle that were done with a different lining system. They were specified to be a -- what we call a "textured liner"; it's a real course, rough thing with a high-friction surface on it. There were a couple of cells that were built with smooth. Why? I can't answer;</u></p> <p><u>I wasn't there at the time. But the due diligence of that analysis brought that to light. So, what that means is, instead of having a real course friction angle in some of these cells, it's smooth, so it's not quite as resistant to movement.</u></p> <p><u>However, looking at it in the light of the whole project, I want to make sure that everybody knows the landfill was stable, there was no -- ever any sense or -- that the facility was going to slide. So, I want to make sure everybody is clear. Even though that friction value was lower in some areas, the whole site was stable and there was never any problems from that perspective. Id. at 134.</u></p>
<p><u>11.27 There are two types of safety factors, static and seismic. (Tr. 257). Seismic is when movement is anticipated and is calculated into the analysis. (Tr. 258).</u></p>		<p><u>Mr. Siu testified that the seismic safety factor is different from the static safety factor. See Transcript at 257. As to the seismic safety factor, Mr. Siu testified, "There's a number of ways to do seismic.</u></p> <p><u>You can do it by using what they call a pseudostatic; and that is, you try to analyze in such a way that there would be no movement, and then you would, again, have a factor of safety. The other way, which this facility is using is, they're using a deformation type of analysis, and there's a determination made as to how much deformation you will -- is appropriate to accept." Id. at 257-58.</u></p>
<p><u>11.28 In a report by EA Engineering, Science and Technology, Inc., the stability factor of 2 is what is proposed with the explanation that safety factors between 1.5 to 1.9 is acceptable when it does not 'pose and imminent threat to human health or the environment.' The proximity to Farrington Highway and Kai Lani subdivision suggest imminent threat and supports the increase to 2.0. Exhibit H at 6.</u></p>		<p><u>The EA Engineering Science and Technology, Inc. ("EA") Report introduced at the Contested Case Hearing was never authenticated by EA and was not signed by a licensed professional.</u></p> <p><u>Licensed and qualified professionals at DOH and experts retained to assist them will evaluate details of the landfill design. The safety factors, and other analytical approaches used by Waste Management to design the expansion, will be subject to extensive scrutiny to ensure the analysis is appropriate considering all conditions at this site.</u></p>
<p><u>11.29 What is clearly relevant to the general public and not set forth in this DEIS is the issue of the stability of the landfill and the requirement for the berms. It is very relevant especially when viewed in light of the first EIS which said only 59-60 acres were suitable for landfill. This is also important when viewed in light of the criteria of the Blue Ribbon Commission which included the statement that they would fill to "natural grade." (Criteria No. 23). The transcript of the Contested Case Hearing should be made a part of the Final Supplemental EIS as well.</u></p>		<p><u>The Revised Environmental Impact Statement accepted by the Director of Land Utilization on October 17, 1985 (the "first" EIS), stated that WGL contained about 80+ acres of usable land. See Revised Environmental Impact Statement dated May 7, 1984, at S-5, S-7. The usable area was estimated based on the engineering knowledge, operational processes and regulatory environment at that time, all of which have changed since 1984. The usable area for a landfill is subject to continuing evaluation and change over time, as the science and engineering of landfills evolve. WGL is an example. The preliminary design of the usable footprint is disclosed in Section 4 of the DEIS.</u></p> <p><u>The first EIS also mentioned that 57± acres will be used for the landfill. See id. at 2-1.</u></p> <p><u>One part of one of the 31 criteria used by the Mayor's Advisory Committee to provide a basis for comparative analysis of the sites was filling to natural grade. The Committee never assumed that any of the four sites, or an expansion at WGL, would be designed as a landfill to the "natural grade." The final design of the selected site would consider the site specific conditions and would have to be approved by DOH.</u></p> <p><u>Regarding your suggestion that the transcript of the Contested Case Hearing should be made a part of the Final EIS, please refer to the response to comment 17 above.</u></p>
<p><u>11.30 Given the concern of the stability of the landfill and the recent earthquake on the Big Island, a discussion must be had as to what can be done if such a natural disaster caused the landfill to slip onto Farrington Highway. This discussion must look to the fact that expansion will be at the steepest part of the footprint of the parcel of land and the stress it will place on the existing landfill. The people of the Waianae Coast have only one way in and one way out.</u></p>		<p><u>The design of the Waimanalo Gulch expansion considers the seismic and other factors appropriate to the island and to the area of the site. Detailed stability analyses were completed during the project design. The design of the current SUP area and the proposed area of expansion will meet the EPA Subtitle D (40 CFR Part 258) standard for stability. The design of the expansion will be subject to review by appropriate City and State agencies when they evaluate the permit documents.</u></p> <p><u>See also Section 5.6.5., Potential Impacts and Mitigation Measures, pertaining to Seismic Activity (Earthquakes), of the FEIS.</u></p>

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<p>11.31 <u>Stability of the Landfill must be analyzed in light of Figure 3-2 which shows the expansion throughout the 200 acres of land. It will be a total landfill with the exception of a 100 foot buffer.</u></p>		<p><u>As noted in the DEIS, the areas that will be used for MSW and ash cells do not encompass the entire 200 acres. Comments related to stability were responded to earlier in this letter.</u></p>
<p>11.32 <u>Though mentioned earlier, the fact that City states in this section that it has a program to control the 'Contaminated Materials,' this is without basis. It is also without basis that the 'all documentation of asbestos disposal' is present on site. In fact, that is one of violations that WMI could not determine where the asbestos was disposed of. The asbestos disposal plan may set forth a plan; however, from the NOV we know that WMI did not follow that plan. It is unacceptable to simply state a plan and have no enforcement as to whether it will be followed.</u></p>		<p><u>Any waste that is not MSW is considered "special waste," subject to profiling as described in the Operations Plan, which is publicly available at WGSL. The description of the Operations Plan in the EIS, including the Asbestos Acceptance Plan, was developed to address proper waste practices and procedures. The Operations Plan addresses all safety regulations including those in the NOV. Accordingly, the policies and practices outlined in the EIS and detailed in the Operations Plans are more than adequate because they address the issues identified in the NOV. Moreover, the Operations Plan was reviewed by DOH during its evaluation of the grade modification permit application. This permit was approved on February 20, 2008. DOH has been actively reviewing and inspecting landfill operations. Questions now and in the future about the documentation of asbestos disposal will be handled as outlined in the Operations Plan.</u></p>
<p>11.33 <u>As well, statements that their storm water or water drainage are managed is incorrect. Again, the NOV is on point and the amount of leachate which had to be pumped and dumped into the Waianae Sewage Treatment plant needs to be addressed.</u></p>		<p><u>Leachate is not allowed to co-mingle with stormwater runoff. Stormwater runoff is managed pursuant to the Surface Water Plan, and is unrelated to leachate management. While Count XV of the NOV related to a failure to submit the annual surface water (stormwater) plan, the leachate management issues are wholly separate from surface water and stormwater management issues. Again, the Operations Plan was developed to address proper waste handling practices and procedures, and includes extensive stormwater monitoring and surface water management. Leachate level issues related to pump and equipment failures were corrected as part of the NOV resolution.</u></p> <p><u>The leachate that is accepted by the operator of the Waianae Wastewater Treatment Plant was, and continues to be, handled in accordance with regulatory requirements to ensure public health and safety. Leachate is collected at the site, analyzed regularly through independent laboratory tests, and taken to the Waianae Sewage Treatment Plant where it is properly treated. The amount of leachate varies and the need to pump and dispose of it is monitored regularly. The monitoring reports are part of the documentation reviewed by the DOH inspectors and are publicly available. Pumping the leachate from the site and disposing of it at the Waianae Wastewater Treatment Plant are DOH-approved waste disposal practices.</u></p> <p><u>As noted in a memorandum to ENV from the operators of the Waianae Wastewater Treatment Plant, the leachate accepted by the plant for processing has had very little or no impact on the wastewater effluent quality that is being discharged to the ocean outfall. See October 2, 2007 memorandum from the Division of Environmental Quality to Frank Doyle, which was included as a part of section 15 of the DEIS. Leachate management and monitoring will be a part of the Solid Waste Operating Permit application.</u></p>
<p>11.34 <u>Figure 4.9 seems contrary to the representations made to the Ko Olina community. Assuming that the color chart sets forth the sequence of the closure, then the area in the back of the landfill will be closed before the areas closest to Farrington Highway. This means that landfill operations will be visible from Farrington throughout the extended life of the landfill.</u></p>		<p><u>It is unclear what representations are being referred to regarding visibility of the landfill. The closure sequence depicted in Figure 4.9 does not reflect the cessation of actual landfilling operations, but rather the anticipated final cover of those areas. Final cover or closure cannot be installed until the landfill operations associated with the expansion area in the back of WGSL have been completed.</u></p> <p><u>The present plan is to continue filling along the west side of the landfill as the final phase of filling. These operations will start at the west stability berm and continue to the area of the ash monofil. It is important to recognize that the face of the ash disposal area has largely been covered with an interim soil cover, and portions have been planted with natural vegetation. As that vegetation matures and becomes fully established, and as the operator places rocks on the face to emulate the nearby undisturbed ground, even the ash monofil will be much less distinguishable from the surrounding land. Additional landscaping to the front area of WGSL is planned.</u></p> <p><u>See also Section 4.10. Closure of Lateral Expansion Area, of the FEIS.</u></p>
<p>11.35 <u>Cost of the Landfill - Another issue which was a criteria in the Blue Ribbon Commission's consideration was costs. At Section 4.11 a discussion of costs showed \$60,800,000 for the costs of the excavation and other costs for a total cost of \$99,400,000 in 2008 dollars. How are these costs arrived at?</u></p>		<p><u>Engineers did a design cost analysis for the WGSL and calculated costs for anticipated excavation, grading, landfill liners, access roads, a leachate collection system, a drainage system, and other accessory requirements.</u></p>

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<p><u>11.36</u> In addition, the costs of the berms should be included in that these structural changes enable the City to now petition for an extension.</p>		<p>The cost of the existing toe berm is not a part of the anticipated future costs of the expansion project, which are described in Section 4.11. As noted above in response to comment 25, the existing E-1 berm and West berm were a part of the initial design of WGS� and were not included in the estimated costs of future improvements. However, as noted in the response to No. 38, below, the cost of extending a portion of the west berm up the canyon is included in the proposed expansion project.</p>
<p><u>11.37</u> In addition, the reference in the DEIS is to the figure \$86 million as the cost. The discrepancy must be addressed.</p>		<p>The estimated figure of \$86 million dollars was identified on Page 7-30 of the DEIS by SMS Research through consultation with Waste Management, as costs associated with the construction of the site over a 10-year period. The estimated figure of \$99.4 million dollars, also prepared by Waste Management, is provided in the DEIS in Section 4.11, Project Schedule and Cost, and represents operating and construction costs that would be incurred over a 15-year period. Thus, the two figures represent two different periods of time and different activities, and are not comparable.</p>
<p><u>11.38</u> There also needs to be a discussion as to whether additional berms will be required or are anticipated at the site.</p>		<p>At this time, while additional berms are not anticipated, the proposed expansion design includes extending the west berm up the canyon. The final design, however, will be determined during permitting after completion of the EIS process. See also Section 11.2, Final Engineering and Construction Details, of the DEIS.</p>
<p><u>11.39</u> In discussing costs, the City has said it makes a profit of \$4 million a year at WGS�. If this is the case, for a 15 year expansion the operational cost will increase by at least \$6.63 million a year. Why is this then economical?</p>		<p>The EIS does not address the City's profit at the landfill. It is unclear what representations are being referred to regarding \$4 million annual profit. The City is responsible for providing safe and adequate waste disposal, and these costs will exist at any landfill site, regardless of the amount of income it receives because of landfill operations.</p>
<p><u>11.40</u> Section 5 Environmental Setting - Given the recent decisions by the Hawaii Supreme Court, it is necessary to discuss the concept of public trust. This is especially true when looking at the waters of this State. What occurred with the operations of WGS� and the leachate is inexcusable and a violation of that public trust. Note that the leachate was disposed of, for most part, in the Waianae Sewage Treatment Plant.</p>		<p>There has been no violation of the public trust. Pursuant to the public trust doctrine, the state holds certain resources in trust for the benefit of its citizens, establishing the right of the public to fully enjoy them for commerce, navigation, fishing, bathing, and related activities. It is unclear, however, how the principles of the public trust doctrine are applicable to operations of WGS� and the disposal of leachate at the Waianae Wastewater Treatment Plant. Leachate from the landfill is disposed of and processed through secondary treatment at the Waianae Wastewater Treatment Plant, consistent with all regulatory requirements. The content of the leachate is sampled and analyzed regularly through independent laboratory tests. Monitoring data show that the leachate has not changed the water quality near the outfall. See October 2, 2007 memorandum from the Division of Environmental Quality to Frank Doyle, which was included as a part of section 15 of the DEIS. Any suggestion that the disposal of leachate at the Waianae Wastewater Treatment Plant is harming the waters of the State is without basis.</p>
<p><u>11.41</u> In this light, there is inadequate discussion of the leachate. This is especially troubling given the DOH NVO. This requires a discussion as to the how the build up of the leachate affected or could affect the integrity of liner and the stability of the landfill. It must also be addressed in light of the expansion and the stress it will have upon the liner and the stability of the landfill.</p>		<p>The amount of leachate the landfill is expected to produce is based on rainfall and operating experience. The methods used to collect and transport it to the points from which it is extracted and the ultimate disposal of the material are all part of the landfill design and the Operations Plan approved by DOH. The impact of the leachate on liner integrity and landfill stability are design considerations. As noted earlier, the design of the landfill will be subjected to DOH scrutiny to ensure they are consistent with conditions at this site, and with current practice and applicable regulations. The amount of detail in the EIS is adequate as the details of the leachate and site operations will be evaluated with the permit documents by DOH. The depth of leachate is not necessarily related to the integrity of the liner. The impact of various leachate levels on stability was evaluated and reported to DOH. The design and overall factor of safety includes all anticipated operating conditions, including level of leachate.</p>
<p><u>11.42</u> Geology - According to Figure 5.2, the proposed expansion will be primarily in the rRK soil type. This means rock over a large percentage of the surface. In addition, the description of the soil associated with rRK is 'sticky and very plastic.' This means that there will be a 'high shrink-swell potential when moisture laden.' The impact of this type of soil must be discussed when stability of the landfill will be an issue as it goes up the slope.</p>		<p>Soils and geotechnical analyses were performed to meet safety and regulatory requirements. The various factors affecting stability have been and will be taken into account as stability issues are reviewed and analyzed. In addition, DOH and any retained experts will review the analysis. See also Section 5.3.3, Potential Impacts and Mitigation Measures, of the FEIS, relating to soils which addresses this issue.</p>

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<p>11.43 <u>There must be a more detailed discussion as to the slope differential for WGSL in the proposed expansion area. It is admitted to that the upper portion of WGSL where the expansion will take place will be steep with the rRK type soil. How will excavation be safely accomplished in that region must be discussed along with the storage or removal of the excavated 'native soil.'</u></p>		<p><u>The stability of all cut slopes has been analyzed and will be reviewed by registered professionals during construction. All slopes will be excavated to meet required factors of safety and work will be done in accordance with all OSHA requirements. The DOH engineers and staff are expected to review all aspects of the construction during the permit review and while construction is in progress.</u> <u>See also Section 5.3.3. Potential Impacts and Mitigation Measures, of the FEIS, relating to soils which addresses this issue.</u></p>
<p>11.44 <u>The rights to the native soil (rock, etc.) must also be addressed. It is believed that with the present operation, the contractor who does the excavation is permitted to sell the rock and soil and keep the funds. If this is the case, the practice must change and the benefit should be to the taxpayers. If the 'sale' of the rock is part of the contract with WMI, these amounts must be calculated.</u></p>		<p><u>The City retains the ownership rights to the excavated materials. On May 30, 1991, the City received bids for the material excavated, processed, and removed from Waimanalo Gulch Sanitary Landfill. Since August 1, 1991, the City has received royalties for any excavated and processed material removed from WGSL. Until the final design has been approved, it is difficult to determine the volume of excess materials that could be removed from the site.</u></p>
<p>11.45 <u>The DEIS concludes that 'adverse impacts are not anticipated' as a result of the lateral expansion. There needs to be a definition of 'adverse impacts' and how the DEIS concludes that such impacts are 'not anticipated.' Clearly the City and its operator have stated these similar conclusions in prior EISs and the NOV has shown to the contrary. For example how else will height violations be noted other than a 'fly by.' What type of monitoring device will be utilized to establish that the landfill is stable other than mathematical computations performed by WMI's experts? Part of the costs of the operation of the landfill should include a fund which the DOH utilizes to hire its own experts to monitor the landfill activities.</u></p>		<p><u>Adverse impacts to topography, geology, or soils are not anticipated with appropriate mitigation measures. Adverse impacts are detrimental impacts, and include adverse ecological effects, aesthetic effects, historic effects, cultural effects, economic effects, social effects, health effects, whether primary, secondary or cumulative. See HAR § 11-200-2. The height violation, while it exceeded the DOH permit, did not result in an adverse impact to stability. The landfill was stable at all times even when the grade exceedance occurred. The earlier permitted grades were lowered causing in part the grade exceedance. The issue was more complicated than just exceeding a permitted grade height, as the comment portrays. The exceedance was self-reported, since it was known at the time that the grade height was lowered as a precaution.</u> <u>A ground survey is performed by a licensed professional surveyor on a bi-monthly basis to compare existing grades with approved grades.</u> <u>The current operating permit requires seismic monitoring. Inclinometers are being considered for WGSL to aid in identifying movement should it occur. While there is no device that would determine whether a landfill is stable or not, the stability analyses are based on "state of practice," and they, along with the selected factor of safety, are based on experience with similar slopes and extensive analysis of both stable and unstable slopes by the U.S. Army Corps of Engineers and the U.S. Bureau of Land Reclamation. In the case of WGSL, Waste Management has undertaken steps beyond standard practice, and outside experts have reviewed the work performed by its consultants. Additionally, DOH has reviewed the stability analyses and consulted with outside experts.</u> <u>Every ton that goes into the landfill is assessed a fee which is paid to the State to assist with funding their administrative and enforcement activities. DOH already employs inspectors who visit the landfill at frequent intervals.</u></p>
<p>11.46 <u>Regional Hydrology - This discussion in the DEIS is of interest in that it is in direct contradiction to the UIC line which is what is relied upon in the siting of the landfill. Discussion is necessary as to how the UIC line has been arrived at when it is clear that WGSL does sit over and is a part of the 'Makaiwa Aquifer System.' Given the past mismanagement of WGSL by WMI, it is critical that we understand the assumptions which have been made in the past, in particular the UIC line and landfill operations over an aquifer. There is an EPA map on the water systems which differs from that of the DOH. There needs to be a discussion as to difference and how the UIC lines have conveniently been drawn around existing landfill areas throughout the State.</u> <u>Read in conjunction with the discussion in Section 7 as to the natural springs and water sources in the area, there should be an analysis done as to why the UIC line carves out WGSL; and more importantly the long term impact of the landfill over an aquifer.</u></p>		<p><u>The UIC line designations are handled by DOH and other state agencies. Neither ENV nor Waste Management was involved in the determination of the UIC line at WGSL. If location or validity of such lines is in question, it is an issue that must be addressed pursuant to applicable federal or state law and procedure. The UIC line was determined pursuant to state and local law and jurisdiction. The City accepts current laws and regulations as validly enacted and promulgated. The location of the UIC line is one example.</u> <u>We are not aware of the EPA map to which you refer, and cannot prepare a response to a vague reference to an EPA map.</u></p>
<p>11.47 <u>Air Quality - There needs to a discussion in Air Quality of the EPA violations against the WGSL. Though the matter has not been resolved, for the DEIS to be accurate, the violations should be set forth as well as the anticipated remedy for the problems. Also, to the extent that the EPA violations overlap with the NOV, that discussion should also be found in the EIS.</u></p>		<p><u>The matter involving the installation of the gas collection system has been addressed. A gas monitoring and collection system was installed in 2005, and has been operating successfully. It is regulated through the terms of WGSL's air permit.</u> <u>The DOH NOV does not overlap with the EPA violations.</u></p>

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<p>11.48 <u>Under this section, a passing discussion is made of the impact of the 'sludge' and how it is no longer being disposed of at WGS�. The accuracy of the statement is challenged as to when it was 'no longer being disposed of at WGS�.' How much sludge is or has been disposed of at WGS� must be discussed. In addition, it is unclear as to whether the pellets have been authorized for sale. If not, then are these pellets being disposed of in WGS�? It is believed that the statement is incorrect as to whether the sludge is no longer at WGS�.</u></p>		<p>The DEIS does not state that sludge is no longer being disposed of at WGS�. The DEIS emphasizes a change in processing sludge from the Sand Island Wastewater Treatment Plant ("SIWWTP") and the reduction of sludge disposed of at WGS� from the SIWWTP due to this change in processing. The sludge from the SIWWTP previously disposed of at WGS� is currently undergoing treatment in a waste digester at the SIWWTP where the sludge is turned into fertilizer pellets. The process of drying sludge into fertilizer pellets began in March 2007.</p> <p>In June 2007, due to a fire, operations at SIWWTP pelletizing facility ceased until September 2007. During that time 763 tons of de-watered sludge from SIWWTP was landfilled at WGS�. For the entire 2007 year, approximately 3,122 tons of stabilized, de-watered sludge (pelletized and nonpelletized) from the SIWWTP were disposed of at WGS�. At present, all of the de-watered sludge from SIWWTP is turned into fertilizer pellets, and on average, 85% of the pellets is being used for golf course construction and soil manufacturing. The remaining amount of pellets, approximately 15% on average, is disposed at WGS�. All regulatory requirements have been met to allow beneficial use of the pellets. As the process matures and marketability increases, we anticipate a decrease in the amount of pellets that are landfilled at WGS�. Due to unforeseen circumstances, however, such as the June 2007 fire at the pelletizing facility at SIWWTP, there may times when stabilized, de-watered sludge from SIWWTP will need to be landfilled at WGS�.</p> <p>Besides some of the fertilizer pellets from the SIWWTP, stabilized, de-watered sludge from the Honouliuli, Waianae, Kailua Regional, and Kahuku Wastewater Treatment Plants, as well as sludge from private (non-City) sources is still being landfilled at WGS�. For the entire 2007 year, the following approximate amounts of stabilized, de-watered sludge were disposed of at WGS� from the following City waste water treatment plants ("WWTP"): Honouliuli WWTP - 4,192 tons; Kailua Regional - 766 tons; Waianae WWTP - 277 tons; and Kahuku WWTP - 1 ton. Besides the significant reduction of sludge from the SIWWTP being landfilled, the City is in the process of seeking beneficial uses for the stabilized, de-watered sludge from the Honouliuli Wastewater Treatment Plant.</p> <p>See also Section 4.2. Facility Operations, 4.2.1. Waste Accepted at Landfill, of the FEIS.</p>
<p>11.49 <u>Methane Gas - Part of the NOV was a violation as to methane gas. The concern is whether the methane gas is smoldering or burning at WGS�. There needs to be a discussion as to how this is monitored and also that methane gas fires are found in landfill operations and WGS� should be no different. If in fact there is such a fire smoldering, what is the anticipated impact on the community and the stability of the landfill. Though there is an attempt to say that landfill permitted temperatures are higher in other states, the issue is the impact on this landfill which is located so very close to a resort and homes.</u></p>		<p>Extensive studies at WGS� have shown that there is no subsurface fire occurring now or in the past at the landfill. Information demonstrating that there is no fire has been sent to the EPA and DOH.</p> <p>See also the following sections already provided as a part of the DEIS: Section 4.6.1. Explosive Gas, for monitoring requirements related to explosive gases such as methane; and Section 5.7.3. Potential Impacts and Mitigation Measures, relating to air quality addressing the monitoring practices, procedures, and regulations that are in place to mitigate against any potential for impacts associated with the atypical elevated temperatures at WGS�.</p>
<p>11.50 <u>Blasting - As expected, due to the soil type in the expansion, excavation must occur with the assistance of blasting of the rocks. It is significant that the blasting is anticipated to be no more than one per day and no more than one to three times per week. If this is the average, then over a 15 year period these are a significant number of blasting activity. The discussions surround the noise and not as to the stability or structural impact on the landfill and the surrounding area. Related is the discussion on the culturally significant outcroppings which the City claims cannot safely remain in place. If the concern is over the impact of the blasting, then the blasting must have impact throughout the existing landfill. There needs to a discussion as to this fact, along with what impact it will have upon the structural berms presently built.</u></p>		<p>Controlled blasting will not be required for the entire anticipated life of the landfill, and is required only until the construction of the final cell. Controlled blasting does not impact the stability of the WGS� or any of its berms as it will be used only for loosening the rock from the slope. The energy output from controlled blasting is designed to be well below that produced by the design earthquake considered in the stability analysis performed to evaluate the safety of the landfill.</p> <p>See also Section 5.8.2. Potential Impacts and Mitigation Measures, of the FEIS, relating to acoustic characteristics.</p> <p>With respect to the cultural stone uprights, the City has proposed relocation prior to any excavation or controlled blasting at the proposed new expansion area for landfill cells as described on pages 7-81 through 7-87 of the DEIS (Section 7.3.8. Potential Impacts and Mitigation Measures, relating to historic and archaeological resources). The City, Waste Management and SHPD will work to ensure that an appropriate preservation plan is put in place.</p>

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<p><u>11.51 Pueo and Other Birds and/or Animals - It is unfortunate that the DEIS simply dispenses with these animals and birds due to the lack of sighting on a 'survey.' There needs to be a clear description as to how many surveys were taken and when. I have personally seen the Pueo on many occasions fly from WGSL to the area near Lanikuhonua and Kai Lani. It is questioned as to how thorough this survey is. There is a reference to a survey in 1999 and it must be clarified if the DEIS is relying upon this older study. The area is also designated as a habitat for the Elepaio. It appears that the DEIS is disagreeing with this designation. An explanation is needed as to this conclusion.</u></p>		<p><u>The DEIS, Section 5.9.3., Fauna, clearly indicated that two separate surveys were performed:</u> <u>In 2006, Phil Bruner, Ph.D., prepared the report, Survey of the Avifauna and Feral Mammals for the Proposed Waimanalo Gulch Landfill Expansion Project, O'ahu (Appendix F). The purpose was to provide the findings of a bird and mammal field survey. The same area of the site was previously surveyed in 1999 (Bruner, 1999) and data from this earlier survey is provided in the current study for comparison purposes. References to literature and unpublished reports since 1999 are included.</u> <u>According to the 2006 Report, the Pueo or Hawaiian Owl may forage in the area which is consistent with your observation. The area designated as critical habitat for the Elepaio by the U.S. Fish and Wildlife Services is located approximately 2 miles from the WGSL. No impacts to the habitat of the Elepaio are anticipated.</u></p>
<p><u>11.52 Aesthetics - As a person who has lived both at Kai Lani and now the Ko Olina Kai, I have no idea as to how the City can say that the lower portions of the landfill have a 'naturalized' look. It is not natural at all and neither is the view of trucks going up and down the landfill.</u></p>		<p><u>As parts of the landfill are closed, surface treatments including landscaping will be done to change the appearance of the site so that it blends in with the surrounding terrain. The excavation plan includes stockpiling of rocks with a "natural" look. The rocks will be placed on the surface after closing of the landfill. The trucks are a part of the operation and the view of trucks cannot be completely mitigated. We have included additional landscaping along the Kahe Point side of the landfill in order to mitigate views from the Waianae side of the landfill. Just as the view of a natural coastline cannot be mitigated or naturalized once hotel or resort development has occurred, the view of a natural gulch or ravine will be impacted by the presence of a landfill. Nevertheless, efforts to mitigate the impact will be ongoing.</u></p>
<p><u>11.53 The visual impact of WGSL has not been adequately addressed especially with the construction of the rock berm wall. How is this area going to be restored to its original state with a rock berm wall.</u></p>		<p><u>The view of the rock berms will be mitigated by the planting of trees. As they mature, the appearance of the berms will be mitigated by the vegetation. However, given the nature of the use of the site involving landfilling, it will not be possible to return the site to its original condition. The landscaping plans are included in the DEIS as Figures 5-19 through 5-21.</u></p>
<p><u>11.54 Section 6 Public Services, Potential Impacts And Mitigation Measures - Traffic - The DEIS is deficient in that it does not present the numbers of vehicles which travel to WGSL clearly in the body of its statement. It concludes by saying it is not anticipated to add more to the existing pattern. However, what is needed is a discussion as to what is the load and the description of the types of vehicles which will be used to dispose of the MSW or Ash at the WGSL.</u></p> <p><u>With the anticipated growth in the not only the second city of Kapolei but at Ko Olina, this discussion must address the actual numbers and the anticipated impact with the increase number of vehicles due to the growth in the area.</u></p>		<p><u>A traffic study, which includes vehicle counts, is directly cited in the body of the DEIS. As indicated in Section 6.1.1. Traffic Impact Report,</u> <u>"At the intersection with the existing landfill access road, Farrington Highway carries 2,046 vehicles eastbound and 859 vehicles westbound during the AM peak period. During the PM peak period, the overall traffic volume is higher with 1,131 vehicles traveling eastbound and 2,079 vehicles traveling westbound. The critical movement on the Farrington Highway approaches of the intersection is the eastbound left-turn traffic movement which operates at LOS "B" during both peak periods."</u></p> <p><u>"The WGSL access road approach of the intersection carries 11 vehicles southbound during the AM peak hour of traffic. During the PM peak hour of traffic, the traffic volume is slightly higher with 31 vehicles traveling southbound.</u></p> <p><u>The entirety of the report is attached as Appendix I to the DEIS. In general, with the construction of the third boiler at H-POWER, the number of vehicles delivering MSW to WGSL is expected to decrease, and the number of vehicles delivering ash and residue from H-POWER will increase. The overall result will be fewer vehicles arriving and departing from WGSL.</u></p> <p><u>The access road approach of the intersection operates at LOS "C" during both peak periods. Traffic queues occasionally formed on this approach of the intersection with average queue lengths of 2-3 vehicles observed during both peak periods."</u></p>
<p><u>11.55 Wastewater System - There needs to be discussion as how the existing system will be adequate when it clearly was not adequate for the limited expansion as noted in the NOV. The City must honestly discuss the shortcomings of WMI, the operator, who has failed to operate WGSL in a professional manner.</u></p>		<p><u>Wastewater facilities on page 6-10 of the DEIS refers to the toilets and other facilities for the workers at the landfill. Those facilities are currently in place and adequate. The need will not change with the expansion. No violations regarding the wastewater facilities were included in the NOV.</u></p>

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<p>11.56 <u>Odors and Windblown Trash - The fact that those who live by WGS� continue to experience the odors is not adequately addressed by the DEIS. Like the 'surveys' mentioned above, there needs to be a discussion as to how the odors are being monitored. Testimony has been received by people who are on the golf course and those who live in Ko Olina as to odors and windblown trash of the landfill. It is important to note that Counts in the NOV addressed the windblown trash and odor issues. Given the fact that violations have been found, the City must ensure that these violations do not occur again, given that it continues to have the same operator.</u></p>		<p><u>Odor was not a part of the NOV. Waste Management responds to odor complaints and maintains an odor complaint log. Air quality and odor, as well as mitigative measures, are discussed on pages 5-37 through 5-59 of the DEIS.</u></p> <p><u>The wind-blown litter issue has been addressed through litter fences and permanent litter patrol. Litter, as well as mitigative measures, are discussed on page 4-18 of the DEIS.</u></p> <p><u>According to Waste Management, less than 5 complaints were received about odor and/or litter within the last 12 months. Not all of those complaints were verified.</u></p>
<p>11.57 <u>Section 7 Socioeconomic and Related Environment, Potential Impacts and Mitigation Measures - NIMBYism - As expected, the Kailua Neighborhood Board has always been adverse to the closure of the WGS�. This is due to the fact that Ameron Quarry has been viewed as a successor. It is unfortunate that the communities are forced to take positions such as they have. If the City clearly looked at alternatives and did not deal in 'fear' and in its delay tactics, there could have been a long term resolution. It is not acceptable that the City's position is, 'where do you want to put it?' The City is the governmental agency tasked with this obligation and it cannot simply wait, as it has, with the hopes that other agencies will buy in to its mantra that there will be rubbish on the streets if an extension or expansion is not approved.</u></p>		<p><u>The City is tasked with the obligation to provide environmentally sound disposal services for solid waste. There is a need for a landfill on Oahu. The City must select the location of its landfill based on objectively established criteria. In accordance with this obligation, and as stated in the DEIS, the City selected WGS�.</u></p> <p><u>Other areas of the island have had landfills including, but not limited to, Ala Moana, Kaka'ako, Kailua, Kalihi, Lā'ie, Kāne'ohe, Pearl City, Wahiawā and Waipahu. See also http://www.opala.org/solid_waste/archive/History%20Garbage_in_paradise.html. Landfills, freeways, prisons and wastewater treatment plants are an unfortunate necessity of modern civilization. The suggestion that politics, policy and fear play a role in landfill selection is undocumented. Politics and policy, however, have a role in timing of decisions.</u></p> <p><u>It is always important that decision makers provide the public with opportunities for input, even if such opportunities for input cause decisions to be delayed.</u></p> <p><u>However, it is a part of the process expected by the public. WGS� has been selected as the landfill for the benefit of the entire island and was approved by the City Council.</u></p>
<p>11.58 <u>Economic Considerations - The role that Ko Olina plays as it relates to the economic growth for West Oahu is significant. While no one would consider placement of a landfill near Waikiki, the City does not hesitate to continue a landfill operations directly across the street from Ko Olina.</u></p>		<p><u>The City does not discount the importance of economic growth wherever it is occurring on the island of Oahu. While there are no viable landfill sites near Waikiki, places such as Ala Moana Park and the Kakaako Waterfront Park once served as landfills. Various parts of Windward Oahu also supported landfills.</u></p> <p><u>As represented in the DEIS, the City remains committed to the proper operation of the WGS� and to appropriate mitigation of potential adverse impacts.</u></p>
<p>11.59 <u>Discussion on the Landfill impacts on jobs, etc. would exist wherever the landfill is sited. The discussion is lacking as to what could happen if WGS� is expanded as to the development of the Resort.</u></p>		<p><u>The DEIS provided a discussion of the economic conditions of the proposed landfill. Further information concerning the potential for adverse effects to surrounding land uses such as the Ko Olina Resort, will be addressed in the Final EIS.</u></p> <p><u>See also Section 7.1.5. Addendum to Socioeconomic Impacts, of the FEIS, which provides additional information on the potential for effects on property values in the surrounding region.</u></p>
<p>11.60 <u>Fairness Issues - There is a discussion as to how some residents believe that Waianae is the dumping ground for the City; and the expansion of WGS� continues to dump on and places the burden on the Waianae Coast. There needs to be a discussion of the concept of environmental justice and how this discussion required under NEPA should be better explored in the DEIS.</u></p>		<p><u>Environmental injustice is addressed on pages 7-28 and 7-29 of the DEIS. In summary, the median household income in the immediate areas near WGS� exceeds the island average. The City is required to complete the EIS process pursuant to HRS Chapter 343, which does not require an analysis under NEPA.</u></p>
<p>11.61 <u>Community Benefits Package - There needs to be an honest discussion on the benefits package. Remember that the Waianae Coast takes more than the City's rubbish. There is always the issue of 'catch up' for the Waianae Coast because it appears that it is last to receive anything. When the concept of a 'community benefits package' is discussed, there needs to be an analysis as to what the community would be entitled to as all others would and what is received in addition to that. The benefit must be in 'addition to' not merely a replacement of.</u></p>		<p><u>Basic City services are provided to all areas of the island as funded by the City Council, which must approve the City budget each fiscal year. The suggestion that programs and projects for the Leeward Coast communities are not as well funded as those for other parts of the island is undocumented. The current City administration has recognized that WGS� has a potential impact on the neighboring communities and implemented the community benefits program to provide those communities with funding for programs beyond those provided in the regular operating and capital budgets. This administration was the first to recognize the need for such a benefits program.</u></p> <p><u>A Committee comprised of representatives of Leeward Coast communities was established by the Mayor to review funding applications from nonprofit community groups and identify capital projects in their communities, and determine how funds will be utilized. The Committee is diligent in assuring that any program or project they fund will provide services and benefits that are in addition to, and not in lieu of, any provided through the normal City budget process.</u></p> <p><u>See also Section 7.1.3.2. Community Issues and Concerns Regarding WGS�, On The Community Benefits Package, in the FEIS.</u></p>

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<p>11.62 <u>Historic and Archaeological Findings - Prior EISs have not acknowledged the cultural significance of the Waimanalo Gulch. The DEIS recognized what is described as 'Three upright boulders potentially utilized as trail or boundary markers.'</u> <u>It was agreed that the stones were significant and likely used by traditional Native Hawaiian practitioners in the past. The consultants believed these stones should be preserved in place; however, the City has deemed this to be "not an option" and will move the structures. Though the cultural practitioners also expressed a concern as to the appearance of the landfill after it was completed and the boulders returned, it remains the position of the City to ignore these concerns and continue with the construction of the landfill. The DEIS must address whether the landfill expansion is at any cost and the cultural significance should be ignored.</u></p>		<p><u>The City has an obligation to protect public safety and health by providing waste management services. While City has proposed to preserve the stones by relocating them, the final preservation plan has not yet been determined. Relocation and preservation of the stones are currently options under consideration. The plan would be determined based on further consultation with cultural consultants, SHPD, ENV and Waste Management. The option of relocating the stones back to near their original resting places will be considered.</u></p>
<p>11.63 <u>The DEIS must address the sentiments of OHA as stated: OHA has made a field visit to the project site and we noted three significant cultural features that were still intact in the project area. We are also aware of the probable existence of others yet to be discovered in the project area. OHA is further saddened that the larger setting that this project sits in is one that has been highly developed and degraded. Therefore, what TCPs [Traditional Cultural Properties] that remain must be protected. The Department of Planning and Permitting, as a county agency, is mandated by Hawai'i Const. Article XII, section 7, "to preserve and protect customary and traditional practices of Native Hawaiians." Ka Pa'akai O Ka'Aina v. Land Use Comm'n, 94 Haw. 31, 45 (2000). . . . OHA urges that nothing more be done with this project until full cultural assessment has been made of the project area.</u></p> <p><u>(OHA letter of September 21, 2007). At the very minimum, to address OHA's concern, there needs to be a clear statement as to how and what has been done for a 'full cultural assessment' of the project area. In that much of this land has been degraded, it does not give the City the right to continue in its degradation.</u></p>		<p><u>A full cultural impact assessment of the area and archaeological inventory survey were performed, attached to the DEIS as Appendices G and H and summarized in section 7 of the DEIS. A discussion of traditional cultural practices is included in the cultural impact assessment.</u></p> <p><u>No action will be taken at the site until concurrence with SHPD is obtained.</u></p>
<p>11.64 <u>Though he has passed, a respected Kumu Hula of the area, John Kaimikaua, told the story of the role of Palehua and its relationship to WGSL. There is a video of his tale and it should be included in the discussion of the cultural significance of WGSL.</u></p>		<p><u>We have instructed our cultural and archaeological consultant to further investigate this item. If it is applicable, further information on the cultural significance of the content of the video will be referenced in the Final EIS.</u></p>
<p>11.65 <u>The stories of the strange events in the initial construction of WGSL are rich. Yet, the DEIS continues in its predetermined conclusion that the landfill should be expanded.</u></p>		<p><u>The stories are documented in the cultural impact assessment. At the same time, the City is pursuing development of the site because there is a need for a landfill to benefit all areas of Oahu.</u></p>
<p>11.66 <u>Section 8 Relationship to Land Use Plans, Policies and Controls of the Potentially Affected Area - The concepts of the State General Plan have been revisited by the Legislature for the past 3 years. The Legislature has funded the Task Force on Sustainability for the year 2050. The Task Force has adopted its Sustainability Plans for the year 2050. In addition, what is now Act 183, SB 2646 CD1 of the 2008 Session, addresses the concepts of Important Agricultural Lands. The DEIS must engage in the discussion as to what is "important Ag lands" and recognize that it is no longer tied to land classification such as A, B, etc. In this light, does it impact the continued use of WGSL.</u></p>		<p><u>The sustainability of our island State is important. The use of WGSL promotes sustainability through the use of an on-island facility that has remaining but unused capacity. Without Waimanalo Gulch, new land, a precious resource, would need to be prematurely used when there is remaining capacity at this existing public facility.</u></p> <p><u>The DEIS addresses the proposed project's impacts on Important Agricultural Lands in Section 8.3. The DEIS notes that the proposed project is located within the State Agricultural District, however, the subject site is not classified as one of the three types of agricultural land (i.e., prime, unique, or other important agricultural lands) according to the Agricultural Lands of Importance to the State of Hawaii ("ALISH") system.</u></p> <p><u>The subject site is not currently used for agricultural production; is not associated with traditional native Hawaiian agricultural uses; has mostly rocky soil, has a relatively dry climate; and is not near support infrastructure conducive to agricultural productivity.</u></p>

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<p>11.67 <u>The discussion of the Land Use Policies of the area cannot be made without a discussion of the LUC's D&O on the SUP, as amended. The D&O now states that no later than November 1, 2009, the area shall be restricted from accepting any additional waste material and be closed in accordance with an approved closure plan. This is the controlling LUC Order on the site of the proposed expansion. In addition, the City is to provide the LUC with updated status every 6 months. As someone who participated in the LUC hearing, it is clear that the LUC has sent a clear message to the City that it will not be caught in the untenable position that there is no alternative in the time remaining.</u></p>		<p><u>The EIS process will continue to fairly and accurately describe the events leading to the decision to select WGSL as the City's preferred alternative. Further information regarding this past history of events, including the current order of the LUC, will be provided in the Final EIS in Section 2, Project Background.</u></p>
<p>11.68 <u>There is also a need to discuss whether the SUP process under HRS 205-6 is the proper mechanism by which to seek this expansion. The DEIS must consider whether a boundary amendment must be sought for this further expansion.</u></p>		<p><u>Because the subject property is located within the State Agricultural District, a State Special Use Permit ("SUP") must be obtained. HRS § 205-6 provides that the county Planning Commission "may permit certain unusual and reasonable uses within agricultural and rural districts other than those for which the district is classified." Because the SUP will be for land greater than 15 acres, the approval by the LUC is necessary. In the past, the LUC has granted SUP approvals for landfills, including WGSL. For purposes of the expansion addressed herein, the City may pursue either an SUP or a boundary amendment. This procedural decision does not impact the analysis contained in the EIS.</u></p>
<p>11.69 <u>Section 9 Alternatives to the Proposed Action - This discussion in the FSEIS (most recent EIS on the property) and other documents has been inadequate in addressing alternatives. After all these years, the City must have a better response on alternative technologies, transshipment and other sites than what is provided. Again, it appears that it is simply easier to continue to have the existing landfill; and therefore all attempts to address alternatives in good faith will never be a reality.</u></p>		<p><u>The City has in good faith pursued alternative technologies that are reliable, cost efficient and scalable, and issued an RFP for alternative technologies. In response to the RFP, the only qualified proposals were for existing mass burn technologies. The City is currently pursuing mass burn technology through the expansion of H-POWER. As noted in the DEIS, no alternative can completely eliminate the need for a landfill. WGSL is a strategic component of the City's solid waste management system and the final destination for certain solid wastes including MSW, recycling residue, and H-POWER generated ash, residue and unacceptable waste that cannot be further combusted, shipped, recycled or reused.</u></p>
<p>11.70 <u>The City has failed to timely develop its Solid Waste Management Plan. In that this is not a reality, documents such as this DEIS is not being judged by the appropriate measure.</u></p>		<p><u>The City has an Integrated Solid Waste Management Plan, and an update of that plan was adopted by the City Council in December 1994 through Resolution 94-306, CD1. A new draft update to the City's Integrated Solid Waste Management Plan was sent to DOH on July 1, 2008, for review. The DOH will determine its appropriateness prior to consideration by the City Council.</u></p> <p><u>The words "judged by the appropriate measure," are undefined and unclear. The DEIS as well as the Final EIS are prepared according to the standards set forth in HRS Chapter 343, as well as Hawaii Administrative Rules, Title 11, Chapter 200.</u></p> <p><u>See also Section 2.6. City Plans Involving the Future Handling of Solid Waste, of the FEIS, relating to the Integrated Solid Waste Management Plan.</u></p>
<p>11.71 <u>An RFP for transshipment was solicited by the City. It is believed that the company who has been working on transshipping has had its bid challenged. If the City agrees that the bid is too low, then transshipment will not become a reality. The City does not prefer to transship because of the loss of revenue for the City. The DEIS must do a proper analysis of the loss of revenue and recall that cost is not a limiting factor in the discussion of alternatives.</u></p>		<p><u>A request for bids ("RFB"), not an RFP, was issued by the City for interim transshipment of MSW. The lowest bidder's bid has been challenged by three procurement protests, and the process to rule on the protests is on-going. If the low bid is ultimately determined to be a non-responsive or non-responsible bid, or the bid is otherwise rejected, then next lowest bid will be considered, consistent with applicable public procurement laws. As evidenced by the fact that an RFB for interim shipping was issued, and funds for this program have been appropriated, the City desires to transship; and if a contract can be awarded after the procurement protests are resolved, the City will transship up to the amount of available funds.</u></p>
<p>11.72 <u>What is also of concern is the discussion on Plasma Arc and how this technology does not meet the City's requirements. The DEIS does not recognize the technology which is successfully operating in Japan and the GeoPlasma facility to be operational in St. Lucie, Florida. What is just as troubling is the absence of recognition that on May 7, 2008 SB 1720 HD2 was enrolled with the Governor and on May 23, 2008 it was signed into law as Act 104 (2008 Session). This Act relates to the Special Purpose Revenue Bond to Assist Jacoby Development, Inc., a Processing Enterprise. Jacoby Development Inc.-Geoplasma LLC is authorized to issue a SPRB to build a similar facility as Florida's in Hawai'i which will not cost the taxpayers anything. Instead of welcoming such a technology, the City, instead, finds that the technology is not adequate.</u></p>		<p><u>A discussion of why the Plasma Arc technology is inadequate at this time is contained in Section 9 of the DEIS. That section identifies the Plasma Arc plant operating in Utanshani Japan and provides a table summarizing the operating results from 2005. It also showed that the plant had not generated power for commercial sale during that time. The plant proposed for St. Lucie, Florida is also identified. Jacoby Development and St. Lucie are still in negotiations and construction of plant has not yet commenced. In addition, the DEIS identifies a plant in Ottawa Canada (owned by Plasco) that began processing MSW on January 26, 2008.</u></p> <p><u>The Plasco plant capacity is 85 tons per day of MSW. The operator of the plant posts reports monthly detailing the operating statistics. The following table shows the average amount of waste processed daily through the plasma system at the plant since start of operations. Power was first generated in the plant in February 2008. The results in this table are for the plant in startup, and should improve with time.</u></p>

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		<p><u>The plant capacity will not meet the City's minimum requirements even at full capacity operation.</u></p> <p><u>The discussion of plasma technology in the EIS will be revised to reflect these later operating results. The EIS will also be revised to reference Act 104 (SB 1720), which became law on May 23, 2008.</u></p>
<p><u>11.73 Discussion of alternative landfill sites are also premised on the Blue Ribbon Commission's findings. As stated earlier, the assumptions upon which the Commission made its recommendations are incorrect and must be re done. The landfill capacities and costs are especially problematic given the obvious misinformation provided by R.M. Towill. Look at Table 9-13 to demonstrate the difference in what is presented and what is the reality. This DEIS is placing the costs of WGS� expansion at \$86-99 million.</u></p>		<p><u>The subject DEIS has documented the work of the Mayor's Advisory Committee and where appropriate has updated the basis for the findings of the Committee with new information to ensure that changed conditions were fairly and accurately considered in this current EIS effort. For example, according to the DEIS, Page 9-70, "Since the Advisory Committee report was completed, additional information has been provided regarding the cost of acquiring the Ameron Quarry and Makaiwa Gulch sites. In the Advisory Committee report, the cost of acquisition was the assessed value for property [tax] purposes. Parties representing Ameron Quarry and Makaiwa Gulch provided information to correct that information in letters appended to a letter from City Councilmember Tam to the State LUC.</u></p> <p><u>The information from Ameron Hawai'i and the Estate of James Campbell was subsequently used to maintain the integrity of the analysis. (DEIS, Page 9-70).</u></p> <p><u>With regard to the contents of Table 9-13, Revised Evaluation of Criterion 18, Cost of Site Acquisition, it is noted that the table identifies the cost of acquiring the various sites evaluated. Because the City already owns WGS�, the cost of acquisition is represented as \$0. The site acquisition costs provided in Table 9-13 are completely different and are not to be confused with the construction and operating cost of \$99.4 million for a period of 15 years provided in Section 4.11, Project Schedule and Cost, and the \$86 million for construction over a period of 10 years provided on Page 7-30. See also the response to letter item no. 37, above.</u></p>
<p><u>11.74 It will always be the position of the people of the Waianae Coast that there should be no more landfills on our community. We have borne the burden for not only the landfills, MSW and construction, but also the power generation facilities, live fire exercises, the homeless, etc. There is a need to look at these alternatives in terms of what is fair and in the context of environmental justice.</u></p>		<p><u>The specific term "environmental justice" as defined by the EPA applies to documents prepared under NEPA standards and regulations. The subject DEIS, prepared pursuant to Chapter 343, HRS, however, does provide further discussion of "environmental injustice" in Section 7, Socioeconomic and Related Environment, Potential Impacts and Mitigation Measures.</u></p> <p><u>While the subject EIS has been prepared to specifically address the potential for significant environmental effects associated with the proposed project, the consideration for potential impacts associated with other power generation facilities, live fire exercises, and the homeless, while important issues, are not a part of the environmental disclosure of the subject project. Please also refer to the response to comment 60 above.</u></p>
<p><u>11.75 What is evident is that the City is not being honest in its discussion on Maili Quarry. This DEIS fails to note that the LUC denied that SUP permit of Sphere to operate a Construction and Demolition Landfill on the site. It is just as improbable that the LUC will grant a MSW landfill on the site. The proximity of this site to Maili Elementary School and its low water table is problematic. In addition, this site did accept AES's ash without a proper permit and without lining its landfill operations. In addition, traffic and access is a major concern. This landfill site is located off of a private road, Paakea which has been the site of major accidents due to the "dip" in the road. The question is whether the City will compute into its costs for the Quarry, the cost of the road and of access.</u></p>		<p><u>The Sphere Application was dismissed for a purely procedural reason, namely, because of a lack of jurisdiction. The case was not dismissed based on the merits. What the LUC would do if the City were to seek appropriate permits to operate an MSW landfill at Maili is not known.</u></p> <p><u>Maili appears to be a less attractive site for a landfill than Waimanalo Gulch. The Mayor's Advisory Committee also concluded that Maili was the least attractive out of the five sites as shown on table 9-15. The costs of road improvements were reflected in Cost of Development Criterion (number 19) for the Maili Quarry, which was published with the Mayor's Advisory Committee report. It should be noted, that the costs developed for the Mayor's Advisory Committee evaluation were based on the publicly available data and would be recalculated with site specific data if the site were selected by the City Council.</u></p>
<p><u>11.76 Nanakuli B is the site of a proposed private landfill. Nanakuli B will cause major traffic problems for the people of the Waianae Coast. The community will fight Nanakuli B because it is the expansion site of PVT Landfill, the only Construction and Demolition Landfill on this island. It cannot be the intent of the City to place two landfills across the street from each other and cause this community to bear this burden for a measly pay off. This DEIS must look into this inequity. The people of the Coast also want PVT closed.</u></p>		<p><u>The purpose of this EIS is to disclose the potential environmental effects of the proposed expansion at WGS�, not to close PVT Landfill. Nanakuli B appears to be a less attractive site for an MSW landfill than Waimanalo Gulch. The Mayor's Advisory Committee also concluded that Nanakuli B was the third least attractive out of the five sites as shown on table 9-15.</u></p>

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<p><u>11.77 Ameron Quarry is dispensed with because of costs. When the true costs of the expansion of WGSL is computed, the costs of WGSL exceeds that of Ameron.</u></p>		<p>Ameron Quarry was not "dispensed with because of costs." A review of Table 9-15 shows that Ameron Quarry received a lower score than WGSL across the 31 criteria. Information provided by the operators/owners of both the Ameron Quarry and the Makaiwa Gulch sites was considered. Both had advised the City that the cost of acquisition needed to be increased. Table 9-13 identifies the scoring for all five sites before and after the revision of the cost of acquisition. As can be seen in both Tables 9-13 and 9-14, the relative ranking of the sites with respect to their suitability as a landfill changed, but the clear conclusion that Waimanalo Gulch was the higher ranked site was unchanged.</p>
<p><u>11.78 What is lacking in this DEIS is the fact that in a few years, the status of H Power will also be an issue. If the City decides to re purchase H Power, then that cost must be made known and its impact on the cost of solid waste disposal. The expansion to a third boiler will have major cost implications.</u></p>		<p>Please see Section 9, Alternatives Analysis, of the Final EIS regarding the relation of expansion of H-POWER to WGSL. Should H-POWER add a third boiler, a full environmental review will be performed in accordance with applicable laws and regulations of the federal, state, and City & County of Honolulu governments.</p>
<p><u>11.79 Underlying all of this is the discussion on 'flow control' of the MSW. This DEIS is inadequate in that until the necessary 'flow control' is defined, the alternatives as it may be available by other vendors will not become a reality and what will remain is only the expansion alternative.</u></p>		<p>The DEIS adequately addresses the City's responsibility to manage solid waste for the City & County of Honolulu. Flow control is important and has been upheld by the U.S. Supreme Court because in order for local governments to properly manage solid waste and promote alternatives to landfilling, they need the ability to direct flow. The City has flow control pursuant to state law, and consistent with that authority, will continue to exercise such control so that it can be assured that various initiatives that minimize the need for landfill capacity can be managed and financed. The City's efforts to decrease the need for landfill disposal include expanded waste-to-energy capacity, interim transshipment of waste while additional H-POWER capacity is being constructed, expanded curbside recycling programs and illegal dumping control.</p>
<p><u>11.80 Notwithstanding, what is truly lacking in the DEIS is a combination of alternatives. To discuss these choices as a 'zero sum' game does not make this DEIS a true document upon which the decision makers can rely upon.</u></p>		<p>Please see section 9, Alternatives to the Proposed Action of the Final EIS for a discussion of a combination of alternatives. Alternatives have been discussed, but Oahu will always need a landfill because there will always be waste that cannot be further combusted, shipped, recycled or reused. Any viable alternative cannot completely eliminate the need for a landfill. Thus, a combination of viable alternatives will not eliminate the need for a landfill.</p>
<p><u>11.81 Section 10 Irreversible and Irretrievable Commitment - Again, the DEIS is a document with a predetermined outcome. It is simpler for the City to expand WGSL than to truly explore alternatives. Promises of how the landfill will operate better and mitigation will be enforced are empty promises in light of the past performances and present performances. The recent lawsuit against Schnitzer Steel shows how there is no monitoring by the WGSL or the City before millions are given for a rebate which allegedly should not have been given. The DEIS is without basis to make such a representation or conclusory statement to the public.</u></p>		<p>The purpose of the DEIS and the HRS Chapter 343 environmental review process is not to select the ideal landfill site. Rather, Waimanalo Gulch was selected by the Honolulu City Council in December 2004. The history of that process and the outcome of that selection process is presented in section 2 of the DEIS.</p> <p>The DEIS is an informational process prepared in compliance with HRS Chapter 343 and HAR Title 11, Chapter 200, and discloses "the environmental effects of a proposed action, effects of a proposed action on the economic welfare, social welfare, and cultural practices of the community and State, effects of the economic activities arising out of the proposed action, measures proposed to minimize adverse effects, and alternatives to the action and their environmental effects." HRS § 343-2. Here the proposed action, consistent with the City Council's decision, is to expand WGSL as Oahu's future landfill site.</p> <p>Notwithstanding the allegations of any pending lawsuit, there are and have been considerable and substantive monitoring efforts, inspections, record keeping and reports regarding operations at WGSL. These requirements and records are being and have been maintained in accordance with WGSL's operating permit issued by the Solid and Hazardous Waste Branch of DOH. All records and reports are generally available publicly at DOH.</p> <p>Please refer to the response to comment 8 above regarding the Schnitzer Steel lawsuit.</p>
<p><u>11.82 Section 11 Unresolved Issues - Missing in this section is the EPA violations. In addition, it is disconcerting that the DEIS will have as an unresolved issue; the stone uprights.</u></p>		<p>The EPA violations have been added to the Final EIS at Section 11. Note that the EPA violations were discussed on pages 2-14 through 2-16 of the DEIS.</p>

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<p><u>Given that these issues are 'unresolved,' this DEIS could have been made public sooner. This is all part of the plan to go before the governmental agencies with no time left and to ask for yet another extension or the expansion.</u></p>		<p><u>The EISPN for the proposed project was published in November 2006. The stone uprights were located in the Spring of 2007. Due to a staff shortage at SHPD, evaluation of the cultural significance of the stone uprights was delayed, and the cultural impact assessment could not be completed. Because a cultural impact assessment is required in an EIS, completion of the EIS was delayed. The final preservation plan for the stone uprights has been identified as an unresolved issue in Section 11 of the Final EIS. The City and Waste Management will work with SHPD to ensure that an appropriate preservation plan is put in place.</u></p>
<p><u>11.83 Section 12 Permits and Regulatory Approvals that May be Required - The DEIS fails to recognize the State Land Use Commission is a State agency not within the City & County of Honolulu's process. In fact, HRS § 205-6 is the State Land Use Commission statute. This DEIS should address whether a boundary amendment will be required and not a SUP.</u></p>		<p><u>This comment will be addressed in a revised Section 12, Permits and Regulatory Approvals That May be Required, in the Final EIS. For purposes of the expansion, the City may pursue either an SUP or a boundary amendment, and both will be identified in the Final EIS. This procedural decision does not impact the analysis contained in the EIS.</u></p>
<p><u>11.84 Section 14 Significance Criteria - The DEIS provides its analysis of the significance criteria as set forth in §11-200-12 of the EIS Rules. The Rules provide:</u></p> <p><u>A. In considering the significance of potential environmental effects, agencies shall consider the sum of effects on the quality of the environment, and shall evaluate the overall and cumulative effects of an action.</u></p> <p><u>B. In determining whether an action may have a significant effect on the environment, the agency shall consider every phase of a proposed action, the expected consequences, both primary and secondary, and the cumulative as well as the short-term and long-term effects of the action. In most instances, an action shall be determined to have a significant effect on the environment if it:</u></p> <ol style="list-style-type: none"> <u>1. Involves an irrevocable commitment to loss or destruction of any natural or cultural resource;</u> <u>2. Curtails the range of beneficial uses of the environment;</u> <u>3. Conflicts with the state's long-term environmental policies or goals and guidelines as expressed in chapter 344, HRS, and any revisions thereof and amendments thereto, court decisions, or executive orders;</u> <u>4. Substantially affects the economic welfare, social welfare, and cultural practices of the community or State;</u> <u>5. Substantially affects public health;</u> <u>6. Involves substantial secondary impacts, such as population changes or effects on public facilities;</u> <u>7. Involves a substantial degradation of environmental quality;</u> <u>8. Is individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger actions;</u> <u>9. Substantially affects a rare, threatened, or endangered species, or its habitat;</u> <u>10. Detrimentially affects air or water quality or ambient noise levels;</u> <u>11. Affects or is likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters;</u> <u>12. Substantially affects scenic vistas and viewplanes identified in county or state plans or studies; or,</u> <u>13. Requires substantial energy consumption.</u> <p><u>The DEIS answers each and every criteria in the negative. This provision of the EIS Rules is not applicable in that this section is relevant if there is to be a determination of no impact and therefore an EIS or an Environmental Assessment ('EA') will not be required. Specifically:</u></p> <p><u>§ 11-200-9 Assessment of Agency Actions and Applicant Actions</u></p> <p><u>A. For agency actions, except those actions exempt from the preparation of an environmental assessment pursuant to section 343-5, HRS, or section 11-200-8, the proposing agency shall:</u></p>		<p><u>The comment that discussions of secondary and cumulative impacts associated with the project were not provided is incorrect. Secondary and cumulative effects were discussed and addressed in the DEIS in Section 1.4, Secondary and Cumulative Effects. The discussion concerning significance criteria was discussed and addressed in Section 14, Significance Criteria.</u></p>

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<p><u>4. Determine, after reviewing the environmental assessment described in paragraph (3), and considering the significance criteria in section 11-200-12, whether the proposed action warrants an anticipated negative declaration or an environmental impact statement preparation notice, provided that for an environmental impact statement preparation notice, the proposing agency shall inform the accepting authority of the proposed action;</u></p> <p><u>However, what is missing is paragraph I of the Contents of a Draft EIS: § 11-200-17 provides at:</u></p> <p><u>I. The draft EIS shall include a statement of the probable impact of the proposed act on the environment, and impacts of the natural or human environment on the project, which shall include consideration of all phases of the action and consideration of all consequences on the environment; direct and indirect effects shall be included. The interrelationships and cumulative environmental impacts of the proposed action and other related projects shall be discussed in the draft EIS. It should be realized that several actions, in particular those that involve the construction of public facilities or structures (e.g., highways, airports, sewer systems, water resource projects, etc.) may well stimulate or induce secondary effects. These secondary effects may be equally important as, or more important than, primary effects, and shall be thoroughly discussed to fully describe the probable impact of the proposed action on the environment.</u></p> <p><u>The population and growth impacts of an action shall be estimated if expected to be significant, and an evaluation made of the effects of any possible change in population patterns or growth upon the resource base, including but not limited to land use, water, and public services, of the area in question.</u></p> <p><u>Also, if the proposed action constitutes a direct or indirect source of pollution as determined by any governmental agency, necessary data shall be incorporated into the EIS. The significance of the impacts shall be discussed in terms of subsections (j), (k), (l), and (m). [Emphasis added.]”</u></p>		
<p><u>11.85 The section of the EIS rules which applies to the DEIS, has its own definition of ‘significant impact’ as defined above. What the DEIS is clearly lacking is the discussion of secondary impacts. The recent Supreme Court decision in Sierra Club v. DOT, 105 Haw. 299, 167 P.3d 292 (2007) is on point. This case is also known as the ‘Superferry Case’ and it clearly has redefined the concept of secondary impacts. It is presumed under the EIS Rules that there is a secondary impact. This DEIS is void of any such discussion.</u></p>		<p><u>There are very significant differences between the Superferry case and the City Council’s selection of WGSL as the site of Oahu’s future landfill. In the Superferry case, there had been no ongoing or existing ferry operations in the state. Here, WGSL has been in operation since 1989, almost 20 years ago. Unlike the Superferry case, secondary impacts of WGSL are and have been known and observable since it began operations in 1989.</u></p> <p><u>Thus, the impacts of current operations at WGSL are known and have been observed for years. It is not necessary to predict or assume such impacts. Most of the Ko Olina Resort was planned, developed, marketed and sold while WGSL was in full operation. Most of the town of Kapolei was built and developed while WGSL was in full operation. The land use growth, population growth, and public services in the Kapolei and Ko Olina areas developed while WGSL was in full operation.</u></p> <p><u>Thus, secondary impacts on growth, population, and public services are likely related to city policies rather than the presence of a landfill.</u></p> <p><u>Secondary and cumulative impacts are discussed and addressed in Section 1.4 of the DEIS.</u></p>
<p><u>11.86 The DEIS has incorrectly concluded there is no significant impact under the EIS Rules. Clearly the DEIS has not met its burden to overcome the assumption of significant impacts for a public works project such as this.</u></p>		<p><u>There is no “assumption” of significant impacts for the proposed expansion of WGSL. Additionally, the DEIS concluded that when appropriate mitigative measures or other actions are undertaken, that potentially significant adverse impacts can be reduced to acceptable levels that would not constitute an adverse effect.</u></p>
<p><u>11.87 Hawaii Law - There will be finding of significant impacts because in order for an EIS to stand the test under Hawaii law, it must be, 1) compiled in good faith; 2) met statutory requirements; and 3) provided sufficient information for the decision maker to make an ‘environmentally-informed choice.</u></p>		<p><u>The contract between Waste Management and the City is a publicly available document. Amendment No. 5 to the contract, dated May 1, 1999, provided for the expansion of the Waimanalo Gulch site. Subsequently, the prior City administration decided on a five-year limit for the use of the site. The contract was not amended to a shorter term because the exact date of termination could not have been determined. Furthermore, Amendment No. 5, reads, in relevant part:</u></p>

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<p><u>1. The EIS Was Not Compiled In Good Faith. The supplemental EIS's contents must comply with the requirements of an EIS. HAR § 11-200-14. An EIS is "meaningless" if it is self serving and rationalizes an outcome.</u></p> <p><u>The Ninth Circuit has identified this concern as 'timing.' Idaho Sporting Congress, Inc. v. Alexander, 222 F.3d 562, 568 (9th Cir. 2000). In Idaho, the ninth Circuit reversed the district court's denial of an injunction and discussed the timing of the agency's action and the fact that the process shall not be used to rationalize or justify decisions already made. In Metcalf v. Daley, 214 F.3dc 1135, 1143 (9th Cir. 2000), the Ninth Circuit found another violation of the timing requirement and looked to the fact that the EIS process had begun after the agency had signed an agreement making the process one that rationalized the decision. This is exactly what has occurred here.</u></p> <p><u>There are three specific examples of the bad faith. One is the contract of 1999 which has been entered into by WMI and the City. The DEIS should have included this document in that it is critical in understanding how this outcome has been manipulated. The contract is incorporated by reference herein.</u></p>		<p><u>Contractor shall increase the existing Landfill footprint and operate the Landfill for a period of fifteen (15) years from the date of receipt of all permits for the initial operation of the additional landfill area, hereinafter called the Permit Date, or until the landfill is completely filled as determined by mutual agreement of the parties, or closed by regulatory requirement imposed by a state or federal agency, whichever occurs first.</u></p> <p><u>(Emphasis added). Thus, the effective term of the contract could have been shortened if closed by regulatory requirement, such as a failure to extend the SUP. Additionally, the City retains control of the contract and can terminate it at any time when it is in the best interest of the City. As provided in Contract Special Provision 29, the contract can be terminated "in whole or in part, whenever the Director shall determine that termination of the contract, in whole or in part, is in the best interest of the City."</u></p> <p><u>Please also refer to the response provided to comment no. 4, above.</u></p>
<p><u>11.88 The second example is the reliance on the Blue Ribbon Commission and the flawed assumptions. This is especially true when R.M. Towill has been the consultant on almost all of the EISs and the consultant for the Blue Ribbon Commission. An excuse that they are unaware of the topography is absurd.</u></p>		<p><u>This comment is similar to prior comments nos. 3 and 4, contained in your letter. Please refer to the responses provided, above.</u></p>
<p><u>11.89 The third is the contents of the NOV.</u></p>		<p><u>It is unclear how the NOV's contents relate to alleged bad faith in drafting the EIS. The NOV was issued by DOH after the alleged violations had been self-reported. The great majority of the alleged violations had been addressed before the NOV was issued. On December 7, 2007, DOH, the City and Waste Management agreed to a settlement which concluded the NOV process. At that time, there was only a single remaining violation that had not been brought into compliance--the exceedance of permitted grades. On February 20, 2008, DOH issued a grade modification approval which addressed the grade exceedance issue. Thus all alleged violations have been addressed to the satisfaction of DOH. See section 2.3.</u></p> <p><u>The NOV also gave rise to several operational changes at WGSL. The current operating permit substantially increased oversight, monitoring and reporting requirements.</u></p>
<p><u>11.90 2. The Statutory Procedural Requirements Were Not Met. The EIS process is governed by HRS § 343. An EIS is: § 343-2 Definitions. As used in this chapter unless the context otherwise requires: ... 'Environmental impact statement' or 'statement' means an informational document prepared in compliance with the rules adopted under section 343-6 and which discloses the environmental effects of a proposed action, effects of a proposed action on the economic welfare, social welfare, and cultural practices of the community and State, effects of the economic activities arising out of the proposed action, measures proposed to minimize adverse effects, and alternatives to the action and their environmental effects.</u></p> <p><u>The statute also sets forth what the Rules must contain, at minimum. HRS § 343-6. The legal effects of administrative rules are well settled in this jurisdiction. Administrative Rules are to be followed and given the full effect of law. Williams v. Hawaii Medical Service Association, 71 Haw. 545, 549, 7984 P.2d 442, 444 (1990). The Supreme Court has clearly stated that arbitrary and capricious application of the Rules will not be tolerated. Windward Marine Resorts v. Sullivan, 86 Haw. 171, 948 P.2d 592 (ICA 1997). HAR § 11-200-14 through 23 are the requirements in the preparation of Draft and Final Environmental Impact Statements. The "General Provisions" highlight the expectation of the EIS process.</u></p>		<p><u>The consultation process mandated by HRS Chapter 343 and Title 11, Chapter 200, HAR, was followed. The consulted agencies were disclosed in the EISPN and in the DEIS at Section 13. Section 3.4 of the DEIS described the community EIS scoping meetings. Public comments were solicited during these meetings and used to prepare the EISPN and subsequent DEIS. Comment letters regarding the EISPN and responses are included in section 15 of the DEIS.</u></p>

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<p><u>... An EIS is meaningless without the conscientious application of the EIS process as a whole, and shall not be merely a self serving recitation of benefits and a rationalization of the proposed action. Agencies shall ensure that statements are prepared at the earliest opportunity in the planning and decision making process.</u></p> <p><u>This shall assure an early open forum for discussion of adverse effects and available alternatives, and that the decision makers will be enlightened to any environmental consequences of the proposed action.</u></p> <p><u>HAR § 11-200-14.</u></p> <p><u>Title 11, Chapter 200, contain the "Environmental Impact Statement Rules" and the following are examples of Rules which were not met.</u></p> <p><u>a. Full consultation did not occur with the DEIS.</u></p> <p><u>HAR § 11-200-15 A sets forth the following requirements to satisfy the consultation process.</u></p> <p><u>In the preparation of a draft EIS, proposing agencies and applicants shall consult all appropriate agencies noted in section 11-200-10 (10) and other citizen groups, and concerned individuals as noted in sections 11-200-9 and 11-200-9.1.</u></p> <p><u>To this end, agencies and applicants shall endeavor to develop a fully acceptable EIS prior to the time the EIS is filed with the office, through a full and complete consultation process, and shall not rely solely upon the review process to expose environmental concerns.</u></p> <p><u>This provision is to be read with the foregoing General Provisions and the requirements of HAR § 11-200-22 A, which further emphasize meaningful public participation as follows: Public review shall not substitute for early and open discussion with interested persons and agencies, concerning the environmental impacts of a proposed action. Review of the EIS shall serve to provide the public and other agencies an opportunity to discover the extent to which a proposing agency or applicant has examined environmental concerns and available alternatives...</u></p> <p><u>These requirements are clear and unambiguous. Hawai'i case law has consistently held that when statutes or rules are clear and unambiguous, they are to be given effect in accordance with their plain and ordinary meaning. IBEW v. Hawaiian Tel., 68 Haw. 316, 323, 713 P.2d 943, 950 (1986); RGIS Inventory v. Hawai'i Civil Rights Comm., 104 Haw. 158, 160, 86 P.2d 449, 451 (2004).</u></p> <p><u>Under the Rules, the consultation process should have been implemented as soon as possible to engage the appropriate agencies and the public and not rely solely upon the review process.</u></p>		
<p><u>11.91 When the issue of the expansion was brought to the communities, the Mayor prohibited the participation of the elected officials in his meeting. This can hardly be deemed as compliance with the consultation process. In addition, there was no sense that the decision to expand was open for discussion. The discussion was simply, if you don't expand WGSL, then the landfill will go to Nanakuli. This is not a consultation process which is open to the public.</u></p>		<p><u>The meeting referred to above was not a part of the EIS consultation process.</u></p>

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<p><u>11.92</u> Moreover, the concerns of the NOV and the acts complained of therein should give rise to major environmental concerns and require thorough discussions. The DEIS merely dismisses it with the fact that a settlement has been reached. The violation and the fines were the largest in the Nation at that time.</p>		<p>The NOV was issued by DOH after the alleged violations had been self-reported. The great majority of the alleged violations had been addressed before the NOV was issued. On December 7, 2007, DOH, the City and Waste Management agreed to a settlement which concluded the NOV process. At that time, there was only a single remaining violation that had not been brought into compliance--the exceedance of permitted grades. On February 20, 2008, DOH issued a grade modification approval which addressed the grade exceedance issue. Thus, all alleged violations have been addressed to the satisfaction of DOH, and WGSL is currently in compliance with all laws. See section 2.3. of the DEIS.</p> <p>The NOV also gave rise to several operational changes at WGSL. The current operating permit substantially increased oversight, monitoring and reporting requirements.</p>
<p><u>11.93</u> b. The FEIS failed to comply with the requirement to address alternatives. <u>HRS § 343-2 defines an EIS as one that discloses, among other items, the 'alternatives to the action and their environmental effects.'</u> <u>HAR §11-200-17, which sets forth the Contents requirement of a Draft EIS, addresses the requirement as to alternatives as follows:</u></p> <p><u>F. The draft EIS shall describe in a separate and distinct section alternatives which could attain the objectives of the action, regardless of cost, in sufficient detail to explain why they were rejected. The section shall include a rigorous exploration and objective evaluation of the environmental impacts of all such alternative actions. Particular attention shall be given to alternatives that might enhance environmental quality or avoid, reduce, or minimize some or all of the adverse environmental effects, costs, and risks. Examples of alternatives include: ... (Emphasis added.)</u></p> <p><u>HAR § 11-200-17 F. 5 states that 'For any agency actions, the discussion of alternatives shall include, where relevant, those alternatives not within the existing authority of the agency.' In Westlands Water District v. U.S. Dept. of Interior, 376 F.3d 853, 866 (9th Cir. 2004), the Ninth Circuit reaffirmed that alternatives must be rigorously explored and that 'reasonable alternatives' include those not within the jurisdiction of the lead agency. Westlands, supra, at 868. The Ninth Circuit went on to say that '[t]he existence of a viable but unexamined alternative renders an environmental impact statement inadequate.' Id., citing to Morongo Band of Mission Indians v. FAA, 161 F.3d 569, 575 (9th Cir. 1998).</u></p> <p><u>The alternatives discussed by the City assumed the City would operate the landfill and therefore required the purchase of each site. No consideration was given to private landfills and its ability to operate as an alternative landfill location, or alternatively, a private/public partnership. The DEIS fails to address the how much money the City makes on landfill operations and the need to control 'flow' of MSW.</u></p>		<p>The DEIS discussed technical and other alternatives, as well as alternative public and private locations for the proposed action. Numerous sites were eliminated because they did not meet state requirements. An EIS is not required to explore alternatives that "are not significantly distinguishable from alternatives actually considered, or which have substantially similar consequences." <u>Westlands Water District v. U.S. Dept. of Interior, 376 F.3d 853, 868 (9th Cir. 2004)</u> (internal citations omitted). The choice of alternatives is "bounded by some notion of feasibility and need not include "remote and speculative alternatives." Id. (internal citations omitted). "The touchstone [of] inquiry is whether an EIS' selection and discussion of alternatives fosters informed decision-making and informed public participation." Id. (internal citations omitted). The DEIS for the proposed project helps to foster informed decision-making and informed public participation, as evidenced by your letter and similar comment letters.</p> <p>There was no assumption that the City would operate the landfill. In fact, the City does not currently operate WGSL--Waste Management, a private company, is the operator of WGSL under contract with the City. The City is tasked with the obligation to provide environmentally sound disposal services for solid waste. In that regard, the City currently works closely with various private entities, such as those operating the landfill, the Synagro bioconversion facility at Sand Island, H-POWER, and the processing of curbside recyclables. Private sites and public sites were considered for a municipal landfill. As explained in the DEIS, numerous sites were eliminated because they did not meet state requirements. Further, WGSL is the only permitted MSW landfill on the island.</p> <p>The City combines tip fee revenue from City transfer stations and the landfill. The revenue for FY06 was \$14,051,214 as reported in the City and County of Honolulu Operating Budget, Detailed Statement of Revenues and Surplus, Solid Waste Special Fund (250) Disposal Charges. The revenue for FY07 and FY08 was \$10,794,073.00 and \$11,332,649.27, respectively. A small portion of the tip fee revenue is attributed to commercial accounts disposal at transfer stations. Most of the tip fee revenue is generated by commercial accounts disposal at the landfill. In accordance with Chapter 9, Section 9-4.2, Revised Ordinances of Honolulu ("ROH"), only businesses, and federal and state agencies' accounts are charged a landfill tip fee. Homeowners and eleemosynary organizations pay no fees.</p> <p>Your comment regarding flow control is addressed in the response to Comment 79.</p>
<p><u>11.94</u> The DEIS also fails to adequately address the delay in the Solid Waste Management Plan and the City Ordinance which states that by the year 2000, at least 75 percent of the solid waste generated shall be recycled, reused, composted, or otherwise diverted from incineration or placement in the landfill.</p>		<p>The City has an Integrated Solid Waste Management Plan, and an update of that plan was adopted by the City Council in December 1994 through Resolution 94-306, CD1. A new draft update to the City's Plan was sent to DOH on June 30, 2008, for review. DOH will determine its appropriateness prior to consideration by the City Council.</p> <p>The update to the Plan makes it clear that there will always be a need for a landfill in order to manage waste that cannot be further combusted, shipped, recycled or reused, to manage solid waste during natural disasters, and to provide for other contingencies. Please see section 2.6, City Plans Involving the Future Handling of Solid Waste, of the FEIS.</p> <p>Your citation to the City Ordinance is incorrect. The City Ordinance to which you refer is Section 9-1.1, which provides in relevant part:</p>

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		<p><u>Sec. 9-1.1 Findings--Determinations--Goals.</u> <u>(b) (1) In addition to the findings and determinations made under this section, the council establishes the following goals:</u> <u>(A) By the end of 2007, at least 65 percent of the solid waste generated within the city be recycled, reused, composted, used for the generation of power, fuel or electricity through a waste-to-energy or other alternative technology facility, or otherwise diverted from placement in a landfill;</u> <u>(B) By the end of 2010, at least 75 percent of the solid waste generated within the city be recycled, reused, composted, used for the generation of power, fuel or electricity through a waste-to-energy or other alternative technology facility, or otherwise diverted from placement in a landfill; and</u> <u>(C) By the end of 2015, at least 90 percent of the solid waste generated within the city be recycled, reused, composted, used for the generation of power, fuel or electricity through a waste-to-energy or other alternative technology facility, or otherwise diverted from placement in a landfill.</u> <u>(2) The percentage goals in this subsection shall be reviewed annually by the department of environmental services, which shall recommend to the council any necessary revisions. For the purpose of these goals, "solid waste" includes source separated waste generated in the city, but not introduced into the disposal system.</u> <u>Please note that these are goals, as opposed to mandates. Additionally, these goals are subject to revision as necessary.</u></p>
<p><u>11.95 Moreover as discussed above, there is no discussion of secondary impacts which is necessary in order for an DEIS to be adequate.</u></p>		<p><u>Secondary and cumulative effects associated with the subject project was discussed and addressed in Section 1.4, Secondary and Cumulative Effects, of the DEIS.</u></p>
<p><u>11.96 c. The purpose and need section limits discussion. HAR § 11-200-17 D requires the Draft EIS to 'contain a separate and distinct section that includes a statement of purpose and need for a proposed action.' It is a similar provision under NEPA, which is looked upon to guide the discussion on alternatives. Westlands, supra, at 866. In Westlands, the Ninth Circuit looked to whether the preparers had 'arbitrarily and capriciously' narrowed the scope of the statement, thereby affecting the discussion on the alternative.</u></p>		<p><u>The DEIS was prepared in accordance with HRS Chapter 343 and HAR, Title 11, Chapter 200. The DEIS contains separate and distinct sections regarding the purpose and need for the proposed project, located at Section 3.2 and Section 3.3 respectively. These sections reasonably define the objectives of the project.</u></p>
<p><u>11.97 In the preparation of the Draft Supplemental EIS for this proposed expansion, it is critical that the decision maker and the general public are made to understand why the promises of government need not be kept. There should also be an explanation as to why the City prepares this DEIS and the Final EIS will be accepted by another City agency. This is especially true when the accepting agency has attached to it, the Planning Commission which is expected to be called upon to make the decision as to whether an SUP should be recommended to the LUC or whether the process requires a boundary amendment.</u></p>		<p><u>Representations of officials may become law and be binding when appropriately enacted into law, or through other acts that have the force and effect of law. Subsequent Mayors and/or City Councils may, however, change prior law through appropriate legislative, regulatory or legal processes.</u> <u>The Mayor, in accordance with HAR § 11-200-4.A., is the final authority to accept the EIS:</u> <u>A. Whenever an agency proposes an action, the final authority to accept a statement shall rest with:</u> <u>1. The governor, or an authorized representative, whenever an action proposes the use of state lands or the use of state funds or, whenever a state agency proposes an action within section 11-200-6(b); or</u> <u>2. The mayor, or an authorized representative, of the respective county whenever an action proposes only the use of county lands or county funds.</u> <u>The Planning Commission will not be called upon to make any decision as to whether the City should seek a boundary amendment or SUP. For purposes of the expansion addressed herein, the City will decide to pursue either an SUP or a boundary amendment. This procedural decision does not impact the analysis contained in the EIS.</u></p>
<p><u>12. Cynthia K.L. Rezentes</u></p>	<p><u>7/7/2008</u></p>	
<p><u>12.1 I respectfully oppose any lateral expansion of the current Waimanalo Gulch Sanitary Landfill located at TMK 9-2-3: Portion 72 and Portion 73.</u></p>		<p><u>This comment is acknowledged.</u></p>
<p><u>12.2 The Special Use Permit allowing a municipal solid waste landfill at this location should be concluded as of November 1,2009 and this landfill closed as per the intent of the State Land Use Commission, which approved an 18-month extension to the current permit for this location. The current landfill should be closed per guidelines established by the State Department of Health and under guidelines recommended by EPA 40 CFR 258.</u></p>		<p><u>This comment is acknowledged, however, for the reasons cited in the DEIS this option is not available to the City. We note for clarification that the planned area of use will be within an area of the property that has not yet been permitted for use as a municipal sanitary landfill.</u></p>

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<p><u>12.3 Any further request for use of this property should be proposed under a completely new and independent application and EIS with the requisite new surface water management plans, stability analysis, groundwater monitoring system, gas collection system, odor management, litter management, etc.</u></p>		<p><u>The subject DEIS proposes the use of an area of the City owned property that has not yet been permitted nor used as a municipal sanitary landfill. The landfill infrastructure that is proposed for the subject project is based on utilization and integration with several of the environmental management systems that are already in place and operational. New management systems will be installed as appropriate to ensure proper environmental management and compliance. A new EIS for this project is not considered appropriate given the status of review for the current EIS process that is underway.</u></p>
<p><u>12.4 The current landfill has already exceeded the topographical and airspace request per the original EIS at which point said EIS stated that there was a limited amount of the 200 acres of property that was apropos for a landfill. The current landfill has gone beyond that original evaluation and request by not limiting itself to the natural topography but has developed a new topography for the receipt of municipal solid waste. Any further use of the property should be under a new application.</u></p>		<p><u>In addition to the comment above, it is noted that the City has requested an amendment to the current area of landfilling from the LUC to allow for use of the airspace that has exceeded the original area designated in the Special Use Permit. On March 14, 2008, the LUC amended Condition No. 12 of the permit as follows:</u> <u>"The 200-acre Property shall be restricted from accepting any additional waste material and be closed in accordance with an approved closure plan by November 1, 2009, or until the approved area reaches its permitted capacity, whichever occurs first."</u></p> <p><u>While it is acknowledged that an appeal to the LUC regarding this decision is presently on-going, a date for the hearing of the appeal will be at a later date. This process, however, will involve the use of the existing area of landfilling. In contrast, the subject EIS is for the evaluation of uses for an area outside of the presently permitted landfill footprint.</u></p>
<p><u>12.5 With the development of a new topography with which to establish the airspace to allow a 15+ year usage of the property should come the onus to do so responsibly and without potentially increasing the complexity of the analysis of the current landfill stability with increasing loads placed above and to the rear of the landfill (at the highest level of original topography).</u></p> <p><u>As can be seen in the first attached photograph, the topography of the area that is being proposed to be expanded into is within a steep, narrow area of the gulch with a naturally occurring waterway leading directly towards the base of the current landfill. This configuration places more stresses from a narrower base leading into a broader base and thus should be structured to be able to handle its' own load without impacting the current landfill.</u></p>		<p><u>The design of the proposed Waimanalo Gulch expansion considers geotechnical, seismic and other factors appropriate to the island and to the area of the site. Detailed stability analyses by engineering professionals were completed during the project design. The design of the current SUP area and the proposed area of expansion will meet the EPA Subtitle D (40 CFR Part 258) standard for stability. The design of the expansion will be subject to review by appropriate City and State agencies when they evaluate the permit documents.</u></p>
<p><u>12.6 In addition to there being a need to completely separate the current landfill from the proposed expansion, there needs to be an explanation of what activities are or should be allowed to take place upon the landfill once the height limits are reached. As can be seen in the second attached photograph, rock crushing, "daily" cover and other activities besides filling of currently open cells with municipal solid waste occurs. What are the impacts of these activities taking place on supposed "full" cells? This should be projected as there will be less "virgin" land area and more area comprised of municipal solid waste the further into the gulch operations move. Where will these activities take place and how does that affect the analysis of the appropriateness of extending further into the gulch?</u></p>		<p><u>Sufficient space is expected to be available for the proposed project given that only a portion of the approximately 200 acres will be used for landfilling. Space for associated landfill support activities that include the stockpiling of cover material will be in locations approved by the DOH based on the required load bearing capacity and surface stability. Rock crushing is not currently performed at the landfill. Rock crushing that is planned will not be performed on landfill cells that have reached capacity.</u></p>
<p><u>12.7 The analysis of how the expansion of ~37 acres of land equates to 15+ years of usage needs to be demonstrated. If one takes the 60.5 acres of landfill space that will be utilized by November of 2009 and does a strict ratio of the acreage proposed to be used for the landfill expansion (not taking into consideration the more complex nature of a narrower gulch to operate within) there should only be about 12 years worth of capacity beyond November 2009. The claims that there would be a minimum of 15 years life should be proven.</u></p>		<p><u>The linear comparison suggested is inappropriate since it does not take into account the factors that should be considered in engineering the lateral expansion of the site. These factors include geotechnical soils studies and reports to establish appropriate slopes to maintain safety and stability of the site, and hydrogeologic factors to establish safe excavation depths. Other industry and governmental regulatory standards will also be considered in the final design of the site. The engineering design for the site will be reviewed by the State DOH as part of the Solid Waste Permit for consistency of design.</u></p>

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12.8 <u>There continue to be numerous questions with regards to when, if ever, the City proposes to close this area to taking trash from the entire island. Where are the plans for what happens as this area is filled more rapidly than ever due to the expanding development being allowed and built on the island?</u>		<u>The City's long range plan will continue to involve the on-going adoption and use of waste reduction and recycling technologies and practices to reduce O'ahu's dependency on landfilling. However, as noted in the subject DEIS, there are no immediate alternatives including transshipment, that can completely eliminate the need for landfills. Each alternative will result in the generation of some form of waste that cannot be further recycled, reduced, combusted or reused. For these waste by-products landfilling remains the most viable and feasible alternative for disposal.</u>
12.9 <u>Until there is a real faith effort made in addressing the solid waste problems faced by the City and County of Honolulu, I will respectfully disagree with any plans to continue doing "business as usual" and continuing to "dump" on the Leeward Coast.</u>		<u>This comment is acknowledged. The City has in good faith pursued alternative technologies to waste reduction that are reliable, cost efficient and scalable, and issued an RFP for alternative technologies. In response to the RFP, the only qualified proposals received to date have been for existing mass burn technologies. The City is currently pursuing mass burn technology through the expansion of H-POWER. No alternative can completely eliminate the need for a landfill. WGS is a strategic component of the City's solid waste management system and the final destination for certain solid wastes including MSW, recycling residue, and H-POWER generated ash, residue and unacceptable waste that cannot further be combusted, recycled or reused.</u>
13. <u>Henry Eng, FAICP, Director</u>	7/7/2008	
Department of Planning and Permitting		
City & County of Honolulu		
13.1 <u>A rockfall and vibration hazard assessment focusing on potential impacts to existing and proposed residential developments... should be conducted.</u>		<u>See Section 5.3.3. Potential Impacts and Mitigation Measures of the FEIS, relating to soils, for a description of the testing program that will be undertaken to address rockfall and vibration hazards as a result of the use of controlled blasting.</u>
13.2 <u>The Final EIS should include a view impact assessment that describes impacts of the construction and completion of landfill cells and accessory activities until final closure and landscaping from major public vantage points.</u>		<u>See Section 5.10.1. Scenic and Aesthetic Environment, of the FEIS, for further information on the assessment of potential viewplane impacts from major public vantage points.</u>
13.3 <u>The final EIS should clarify if faux rocks are still being considered for the final landscape plan.</u>		<u>Once the expansion is approved, the contractor will perform clearing and grubbing activities each time a new landfill cell is constructed. Surface rocks encountered during this process will be collected and stockpiled for use on the final cap during the closure process. During closure the final cap will be installed and vegetated with a combination of grasses and natural vegetation that is native to the area. These stockpiled rocks will be placed on the final cap after the revegetation process is completed in an attempt to make the final appearance of the landfill blend into the surrounding hillsides. No faux rocks will be needed based on the availability of surface rocks as cell construction moves up through the gulch.</u>
13.4 <u>Initial construction activities for the expansion of the existing landfill may require grubbing, grading, and stockpiling permits. In addition, a grading permit will be required for the final cover that will be placed prior to landfill closure.</u>		<u>This comment is acknowledged and was addressed in the DEIS, Section 12, Permits and Regulatory Approvals That May be Required.</u>
13.5 <u>The discussion on anticipated impacts should consider dust generated by blasting and any required mitigation measures.</u>		<u>This comment is acknowledged. Generally, the type of controlled blasting that is performed at the site has resulted in the minimal generation of dust. However, to further address this concern, personnel performing the blasting will inspect the site for any loose sediments or soils that can constitute a dust source following blasting. As required, the area of the blast will be wetted down to suppress dust.</u> <u>See Section 5.7.3. Potential Impacts and Mitigation Measures of the FEIS, relating to air quality, for a discussion on mitigative measures for dust control from the use of controlled blasting.</u>
13.6 <u>Figure 4-7 on page 4-13 should show the height of HECO transmission lines and the required clearances.</u>		<u>This figure has been revised and is provided in the FEIS.</u>
13.7 <u>Figure 8-1 on page 8-11 should show State Land Use District boundaries with their respective labels. The existing and proposed SUP areas should also be shown.</u>		<u>This figure has been revised and is provided in the FEIS.</u>
13.8 <u>Figure 8-2 on page 8-13 should highlight ALISH categories while de-emphasizing property boundaries. The existing and proposed SUP areas should also be shown.</u>		<u>This figure has been revised and is provided in the FEIS.</u>
13.9 <u>On page 9-80, the section on Makaiwa Hills should be updated to indicate that the project has an accepted EIS and that it is presently undergoing a zone change application process.</u>		<u>We acknowledge the present status of the Makaiwa Gulch project. This comment is addressed in Section 9.7.4.3. Makaiwa Gulch, of the FEIS.</u>

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<p>13.10 <u>There should be a discussion on whether development on the H-Power third boiler would curtail pursuing alternate technologies in the near future or make it economically unfeasible to close the landfill sooner or later.</u></p>		<p><u>The proposed expansion of the H-POWER facility is considered to be independent of the selection of other alternative technologies that may help the City & County of Honolulu with its handling of municipal refuse. This means that the City will continue to evaluate refuse management alternatives whenever feasible and advantageous as part of its overall system for refuse management.</u></p> <p><u>See also Section 2.6. City Plans Involving the Future Handling of Solid Waste, in the FEIS.</u></p>
<p>13.11 <u>A more detailed description of accessory activities, such as recycling, grading, rock crushing, stockpiling and their dust and noise impacts on surrounding uses, especially Makaiwa Hills residential development, and their mitigation measures should be provided.</u></p>		<p><u>General information is provided in the FEIS to describe the community drop-off center to handle residential refuse recycling and disposal in Section 4.1.2. Features of Construction of Lateral Expansion. Adverse effects to the planned Makaiwa Hills project are not anticipated based on the limited scale of this activity that will be restricted to a small area within the interior of the Waimanalo Gulch site.</u></p> <p><u>The potential effects of construction that include grading, rock crushing, and stockpiling, have taken into consideration the Makaiwa Hills development as well as surrounding properties that include Ko Olina and other residences that surround the landfill property. While the detailed operational practices associated with construction will not be determined until such time that the final project plans are prepared following the current EIS effort, Waste Management has already initiated contact with the developer of Makaiwa Hills and fully intends to coordinate its future work activities to minimize and mitigate the potential for adverse effects.</u></p>
<p>13.12 <u>With respect to vendors' proposals in response to "Project to Construct and Operate Alternative Energy Facility and/or H-POWER Facility," January 16, 2007, there should be a table comparing how each vendor's alternate technology meet or do not meet the six (6) minimum requirements.</u></p>		<p><u>The procurement solicitation referred to, Competitive Sealed Proposal No. 047, was cancelled on January 16, 2008 and is no longer under consideration by the City. Accordingly, a comparative table evaluating the proposals against the six minimum requirements was not prepared. However, a description of the City's requirements as they pertain to various alternative technologies has been provided in Section 9 of the DEIS and FEIS documents.</u></p>
<p>13.13 <u>There should be discussion of the City's waste management plans for the years beyond 2024.</u></p>		<p><u>The Integrated Solid Waste Management Plan is presently under preparation and is scheduled for completion in early 2009. Information from a draft of the plan has been provided in the FEIS to describe future activities of the City in managing solid waste for the future. See also Section 2.6. City Plans Involving the Future Handling of Solid Waste.</u></p>
<p>14. Ken Williams, Vice President - Resort Operations Ko Olina Resort & Marina</p>	<p><u>7/7/2008</u></p>	
<p>14.1 <u>The subject Draft EIS is flawed due to an inappropriate statement of need for the proposed project in Section 3.3. This statement of need is inappropriate due to the following reasons:</u></p> <p><u>-It attempts to use the EIS process to supersede site selection procedures required by the State Land Use Commission and initiated by the City Council and the previous City administration. While an EIS is a decision-making tool, Section 2 clearly documents the intent of the State Land Use Commission to use a formal site selection process. The EIS process cannot equal the level of detailed evaluation, dialogue, deliberation and community input that a process dedicated to selecting a landfill site can achieve.</u></p> <p><u>- It attempts to circumvent the State Land Use Commission's intent of establishing a deadline for the site selection process to determine a long-term landfill site. The proposed lateral expansion of the WGSL could defer closure of the WGSL by as much as 15 years or longer. This is contrary to the intent of the State Land Use Commission. Such a lengthy deferral should not be justified by merely reciting failed efforts to select a long-term site.</u></p>		<p><u>The subject DEIS has appropriately stated the need for the project which is consistent with Chapter 343, Hawai'i Revised Statutes (HRS), Environmental Impact Statements. According to Section 343-2, Definitions:</u></p> <p><u>"Environmental impact statement" or "statement" means an informational document prepared in compliance with the rules adopted under section 343-6 and which discloses the environmental effects of a proposed action, effects of a proposed action on the economic welfare, social welfare, and cultural practices of the community and State, effects of the economic activities arising out of the proposed action, measures proposed to minimize adverse effects, and alternatives to the action and their environmental effects.</u></p> <p><u>Each of these requirements defining the EIS, including its use for the purpose of environmental disclosure, has been documented for the Waimānalo Gulch Sanitary Landfill as the preferred alternative for the disposal of O'ahu's municipal solid waste and H-POWER ash and residue.</u></p> <p><u>It is further noted that the subject DEIS provides for the evaluation of alternatives that include potential landfill sites as well as technology based alternatives and other methods, such as waste transshipment, to address the need for the future disposal of O'ahu's municipal refuse. The DEIS, therefore, provides an important source of information for the LUC in evaluating the reasons why the City considers Waimānalo Gulch as the most viable and feasible alternative for our island. This effort to evaluate and provide environmental disclosure information that is relevant to the decision making process is clearly in the public interest.</u></p>
<p>14.2 <u>Based on the situation described in Section 2-Project Background, the statement of need should be for an interim solution to dispose solid waste in the event that the City cannot meet the November 1, 2009 deadline. There is a need to determine how future violations of State and federal laws pertaining to landfill operations can be avoided.</u></p>		<p><u>This comment is noted. However, for reasons stated in the DEIS, the preferred alternative is for the use of the Waimānalo Gulch Sanitary Landfill Lateral Expansion site until the area has reached capacity, which under the present conditions is estimated to be approximately 15 years.</u></p>

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		<p><u>It is acknowledged that prior violations involving the State Department of Health (DOH) and the Environmental Protection Agency (EPA) have occurred in the past at the Waimānalo Gulch Sanitary Landfill. On December 7, 2007, a settlement agreement was reached with the DOH which settled all issues arising from and related to the notice of violation.</u></p> <p><u>At the present time the City and Waste Management of Hawai'i are fully cooperating and working with the EPA to address elevated underground temperatures at the landfill which are higher than anticipated, but which are not indicative of underground combustion conditions such as a fire. A detailed discussion of this item was provided in the DEIS, in Sections 2.3.2. U.S. Environmental Protection Agency and 5.7.3. Potential Impacts and Mitigation Measures (Air Quality).</u></p> <p><u>It is important to note that throughout the events involving the DOH and EPA that self-reporting procedures have remained in place to notify governmental regulatory agencies of the operating practices and procedures applied at the landfill. At no time was the health and safety of the public at risk and we anticipate that based on these procedures that sufficient safeguards will continue to maintain public health and safety.</u></p>
<p>14.3 <u>Throughout Section 5. 6 and 7 the cumulative impacts of the existing WGSL operation are not consistently nor systematically described in each category of environmental setting, public services and socioeconomic setting... Examples of anticipated impacts that will be cumulative include those on flora, fauna, cultural resources and visual/aesthetic.</u></p>		<p><u>The potential for secondary and cumulative impacts have been described separately in both the DEIS and FEIS, in Section 1.4, Secondary and Cumulative Impacts.</u></p>
<p>14.4 <u>Section 6-Public Services, Potential Impact and Mitigation Measures fail to quantitatively and/or qualitatively discuss impacts in each category. For example, historic statistics on fire and police responses to the WGSL should be provided as a baseline for demands created by current operations. These should be compared to anticipated demands following termination of operations on November 1 2009 and anticipated changes in demand should interim operations be continued at WGSL.</u></p> <p><u>Another example is the existing impacts of odors and windblown trash on public and resort facilities from the current operation. These need to be documented by records of complaints, anecdotal reports and prevailing wind conditions as a baseline for assessing termination of operations on November 1 2009 and an interim continuation of operations, including the viability of proposed mitigation measures. The demands on the services of the State Department of Health should also be assessed due to the history of violation at the WGSL.</u></p>		<p><u>The Waimanalo Gulch Sanitary Landfill maintains appropriate and responsive relationships with the local fire and police departments, as well as the Department of Health and other relevant city and state agencies. See Section 15, Comments and Responses to the EISPN, which lists the fire and police comment letters regarding their belief that expansion of the WGSL will not adversely affect the level of commitment that these important institutions provide in maintaining public health and safety.</u></p> <p><u>The Waimanalo Gulch Sanitary Landfill maintains an active litter and odor control program which is described in the DEIS. See Section 4.2.2.</u></p> <p><u>Operational Controls. An odor complaint file is maintained on-site. According to Waste Management, less than 5 complaints were received about odor and/or litter within the last 12 months. Not all of those complaints were verified.</u></p> <p><u>Comments from the DOH regarding potential issues associated with the proposed project is a part of the EIS process. A copy of the DOH comments and the responses to their comments are provided in Section 16, Comments and Responses to the DEIS, which a part of the FEIS. Based on the comments received no adverse impacts to DOH services are anticipated.</u></p>
<p>14.5 <u>Alternatives to the Proposed Action is flawed due to the inappropriate statement of project need, as discussed in item 1, above. Since an interim alternative is not a commitment to a long-term solution, the range of potential alternative sites and methods, or combinations thereof, available for evaluation is greatly expanded.</u></p>		<p><u>The statement of need for the project has been properly prepared and is consistent with the requirements for the preparation of a Chapter 343, HRS, compliant EIS. The alternatives evaluated for the proposed project, as well as the preferred alternative, do not involve the consideration of an interim solution.</u></p>
<p>14.6 <u>Due to the flawed statement of need, the proposed project, assessment of impacts and consideration of alternatives is also flawed. The Draft EIS was crafted around a pre-determined solution to an impasse in selecting a long-term landfill site. As a result, it does not comply with the rigorous decision-making rationale required by Chapter 343, HRS. Therefore, a new DEIS based on a more appropriate statement of need should be prepared.</u></p>		<p><u>Please refer to the responses to Items 1, 3, and 5, above, concerning the preparation of the subject document in accordance with the requirements of Chapter 343, HRS. The subject DEIS does not have a predetermined outcome based on the nature of the document which serves the purpose of environmental disclosure. A new DEIS is therefore neither planned nor appropriate for preparation.</u></p>
<p>15. <u>Ernest W. Lau, Public Works Administrator</u></p>	<p><u>7/9/2008</u></p>	
<p><u>Department of Accounting and General Services</u></p>		
<p><u>State of Hawaii</u></p>		
<p><u>We support the City and County of Honolulu's efforts in resolving the issues related to the island of Oahu's municipal refuse. We have no additional comments to offer at this time.</u></p>		<p><u>We appreciate your statement of support and acknowledge that you have no additional comments to offer.</u></p>

Commenting Party/Itemized Comments	Date of Letter	FEIS Section Reference and Comments*
<p>16. Abbey Seth Mayer, Director <u>Office of Planning; Department of Business, Economic Development & Tourism</u> <u>State of Hawaii</u></p>	7/10/2008	
<p>16.1 <u>The Office of Planning believes that the Draft EIS does adequately disclose potential impacts, alternatives, mitigating measures, and the secondary and cumulative impacts of those areas cross-cutting state concern that we requested be addressed in our comments on the EIS Preparation Notice.</u></p>		<p><u>We appreciate your review of the subject document and acknowledge your statement.</u></p>
<p>16.2 <u>The Office of Planning defers to the State Department of Health on whether impacts relating to public health and safety of the proposed lateral expansion have been adequately disclosed.</u></p>		<p><u>We acknowledge your deferral of potential issues involving public health and safety to the State Department of Health (DOH) and will respond to any concerns identified by the DOH concerning the DEIS in a separate letter.</u></p>
<p>17. Morris M. Atta, Administrator <u>Department of Land and Natural Resources</u> <u>State of Hawaii</u></p>	7/11/2008	
<p>17.1 <u>Engineering Division:</u> <u>Our comments dated December 23, 2006 for the subject, which were incorporated and attached at the Draft Environmental Assessment document, still apply.</u></p>		<p><u>We acknowledge that the comments of the Engineering Division dated December 23, 2006, have been incorporated into the DEIS document.</u></p>
<p>17.2 <u>Division of Forestry and Wildlife, Land Division:</u> <u>We have no comments.</u></p>		<p><u>We acknowledge that the Division of Forestry and Wildlife and the Land Division have no comments.</u></p>
<p>18. Clyde W. Namuo, Administrator <u>Office of Hawaiian Affairs</u> <u>State of Hawaii</u></p>	7/11/2008	
<p>18.1 <u>While OHA understands the need and pressures that surround this proposed action, OHA is concerned that this document focuses too narrowly on the isolated issue of expanding a landfill. We wish to see more of a pro-active and far-reaching effort centering on sustainable waste management.1 This DEIS focuses on the 15 - year window of breathing room that the proposed action buys, and does not offer insight into finite planning for waste in Hawai'i. OHA is disappointed that this proposed project is not coordinated in any way reducing the current waste stream into the landfill.2 There is a demonstrated need to explore how other communities are efficiently dealing with their waste streams. An active recycling program, incentives, taxes, alternative technologies and regulations are just of the few low-hanging fruit that should be taken advantage of.</u></p>		<p><u>The purpose of the DEIS is to address Chapter 343, HRS, requirements relating to the preparation of an Environmental Impact Statement for the planned lateral expansion of the WGSL. The City's Integrated Solid Waste Management Plan is currently being updated and will provide policy guidance with regard to the overall use and relationship between landfilling and waste reduction strategies such as recycling, alternative waste reduction or elimination technologies, and waste transshipment. Although all options will continue to be pursued by the City, the use of landfilling remains the single most viable option for the disposal of MSW and H-POWER generated ash and residue. According to the DEIS (Section 9.7. Preferred Alternative),</u></p> <p><u>"There are several alternative technologies and the transshipment of waste that show promise toward reducing the need for landfills. The generation of MSW that exceeds the processing capacity of H-POWER as well as the generation of ash and residue, however, requires that facilities such as a municipal waste landfill be a part of the City's long term waste management system."</u></p>
<p>18.2 <u>In November of 2006, OHA commented, "We also recommend that you conceive of the project area as a portion of a larger traditional cultural landscape; and, that the possible presence of one or more Traditional Cultural Properties (TCPs) is considered in your CIA (Cultural Impact Statement)."</u></p> <p><u>OHA has made a field visit to the project site and we noted three significant cultural features that were still intact in the project area. We are also aware of the probable existence of others yet to be discovered in the project area. OHA is further saddened that the larger setting that this project sits in is one that has been highly developed and degraded. Therefore, what TCPs that remain must be protected.</u></p> <p><u>We appreciate that a cultural assessment has been made; however, it is important to note that OHA has consistently recommended that the three large upright boulders potentially used as trail markers that constitute State Inventory of Historic Properties (SIHP) site # 50-8012-6903 should be preserved in place. These features would likely be determined to be significant due to information content (criteria D) and traditional cultural significance (criteria E) under the Hawai'i Register of Historic places.</u></p>		<p><u>The evaluation of the stone uprights as a "TCP" will be based on a review of these features in accordance with the requirements of applicable federal and state law for this designation. This evaluation will be performed by a qualified archaeological and cultural resource consultant and reviewed by the State Historic Preservation Division (SHPD) for applicability.</u></p> <p><u>We add that while this evaluation will be performed, it has always been the City's intent that the stone uprights be treated in a manner consistent with its future preservation. See our comment below.</u></p> <p><u>The restatement of OHA's position that the stones be preserved in place is noted. At this time the City is continuing to work with the SHPD and members of the community that have been identified by SHPD as important parties to the process. The final decision regarding the manner of preservation for the uprights will be determined by the SHPD.</u></p>

Commenting Party/Itemized Comments	Date of Letter	FEIS Section Reference and Comments*
<p><u>Not only OHA, but also all the cultural consultants contacted by the applicant recommend the same course of action.4 If the uprights are removed as the applicant first proposes on page 1-22 of the DEIS, then what they mark will be lost as well. There is little point on making them more accessible, as is also proposed, because they are thought to be boundary markers; it is what the stones delineate, not the stones themselves that is more relevant in this place. Access for cultural practitioners should also be considered as is indicated on page 1-31 of the DEIS.</u></p> <p><u>OHA objects to the determination made on page 7-82 of the DEIS which states "Considering the use of the site as a landfill, preservation in place (of site # 50-8012-6903) is not thought to be an appropriate mitigation treatment for the stones, considering their cultural sensitivity." Using the very significance of the stones to destroy their relevance is callous and unfair. OHA also finds it odd that this DEIS repeatedly calls to remove site # 50-8012-6903 (see also pages 7-123 and 124) yet then on page 1 1-1 sites the preservation of the stone uprights as an unresolved issue to "develop and define an appropriate course of preservation." Once again, OHA states that due to the admitted cultural significance of site # 50-8012-6903, they should be preserved in place.</u></p>		
<p><u>18.3 The DEIS mentions environmental injustice on page 1-15 and indicates that "Leeward O'ahu is on the receiving end of many of O'ahu's burdens." The Environmental Protection Agency (EPA) defines this concept as the "fair treatment for people of all races, cultures, and incomes, regarding the development of environmental laws, regulations, and policies." Table 7-1 of the DEIS shows that Wai'anae county has a resident population of 42, 259 while 'Ewa has 68,696. OHA notes that the Native Hawaiian populations in those two counties are among the highest on O'ahu at 65% and 61 % respectively.</u></p> <p><u>We express concern that Native Hawaiian populations are bearing a disproportionate amount of adverse health and environmental effects in this area stemming from what this DEIS on page 1-13 lists as odor, windblown litter, and visual impacts. The DEIS on page 7-21 states that within a 10-mile radius of the project area there are two separate landfills, two existing electrical power plants, a proposed new power generator plant, a deep draft harbor, and an industrial park all of which service the entire island. This is the very definition of environmental injustice. OHA points out there is also a large number of homeless people that have settled there from other areas of the island as well, which this community is now supporting.</u></p> <p><u>The DEIS does little to compensate for these inequalities and even states that "condominium analysis shows a significant correlation of increased value and proximity to the landfill." As such, OHA inquires as to whether or not the applicant actually asserts that living next to the landfill is more beneficial in terms of property value, health, and aesthetics.</u></p>		<p><u>According to the DEIS, Section 9, Alternatives to the Proposed Action, a major part of the reason for identifying Waimānalo Gulch as the preferred alternative from the standpoint of its physical location, is based on the assessment of: EPA Exclusionary Criteria involving physical features advantageous to the siting of a landfill; alternative sites that are located in areas which have since been developed or which are closed landfills with no further expansion potential; Board of Water Supply and Department of Health considerations that involve the need to protect our groundwater supply; and other factors involving the life of the site. The selection of Waimānalo Gulch as the preferred alternative due to the presence of residents with selected characteristics was never a part of the evaluation process.</u></p> <p><u>The correct reference to the presence of public and private facilities is on Page 7-28 of the DEIS. The context for citing this information is that, "A number of interviewees point out that Leeward O'ahu has been and continues to remain on the receiving end of many of O'ahu's burdens." The current Administration recognizes this as a major concern of the community and as noted in the DEIS, has provided \$2.7 million in 2007 as part of a community benefits package with a further distribution of \$2.0 million in 2008. They expect that participation and the benefits provided will continue to evolve as they gain experience in working with the community. (Page 7-20). Other mitigative measures to further address the potential for impacts to the surrounding community have also been identified in Section 7.1.5., Socioeconomic Mitigation Measures.</u></p>
<p><u>18.4 The applicant claims on page 1-32 of the DEIS that "The proposed project provides for the safe and effective disposal of municipal refuse for all the communities of O'ahu." However, OHA notes that this landfill has been in violation with both state department of health and federal EPA regulations.</u></p> <p><u>Further, the landfill was supposed to have ceased operations in May of this year and not benefited from a 2007 application to amend the Special Use Permit which eventually allowed this landfill to remain in operation. The proposed action will only add further burdens to our beneficiaries in these areas.</u></p>		<p><u>It is acknowledged that prior violations involving the State Department of Health (DOH) and the Environmental Protection Agency (EPA) have occurred in the past at the Waimānalo Gulch Sanitary Landfill. On December 7, 2007, a settlement agreement was reached with the DOH which settled all issues arising from and related to the notice of violation.</u></p> <p><u>At the present time the City and Waste Management of Hawai'i are fully cooperating and working with the EPA to address elevated underground temperatures at the landfill which are higher than anticipated, but which are not indicative of underground combustion conditions such as a fire. A detailed discussion of this item was provided in the DEIS, in Sections 2.3.2. U.S. Environmental Protection Agency and 5.7.3. Potential Impacts and Mitigation Measures (Air Quality).</u></p> <p><u>It is important to note that throughout the events involving the DOH and EPA that self-reporting procedures have remained in place to notify governmental regulatory agencies of the operating practices and procedures applied at the landfill. At no time was the health and safety of the public at risk and we anticipate that based on these procedures that sufficient safeguards will continue to maintain public health and safety.</u></p>

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		<p><u>The purpose of the recent amendment to the Special Use Permit which allows Waimānalo Gulch Sanitary Landfill to remain in operation is to allow for the necessary disposal of MSW and H-POWER associated ash and residue. Without this capability the City would be left with no viable means of disposing of O'ahu's refuse. Please refer to the response to Item 3, above, concerning the City's community benefits package.</u></p>
<p><u>18.5 There are further impacts as well, such as the potential for run-off from the site to effect water quality in the area, including the velocity of the run-off. The DEIS on page 1-7 directly states that "There is potential for leachate entering brackish groundwater from the landfill." Additional retention basins, leachate and gas systems are needed as well as the accompanying monitoring that they require. After the fact permit modifications should no longer be granted. OHA is also concerned about the effect that the leachate has on the wastewater treatment plant in the area as well as the eventual final outflow that results from it.</u></p>		<p><u>The potential for leachate entering brackish groundwater is provided in the DEIS, Section 5.5.5. Potential Impacts and Mitigation Measures. This section acknowledges that potential impacts to groundwater resources involve the possible release or entry of leachate entering brackish groundwater. Mitigation to address this concern is provided by use of a Leachate Collection and Removal System. Other measures associated with the protection of groundwater resources are described.</u></p> <p><u>The description and use of retention basins, leachate recovery, and gas control systems that serve to mitigate potential impacts are provided in the DEIS and describe both the existing and proposed future features of the landfill. Further detail can be found in the DEIS sections.</u></p>
<p><u>18.6 Additionally, OHA would also like to suggest that the current project area (and future if permitted) be landscaped with drought tolerant native or indigenous species that are common to the area. Any invasive species should also be removed. Doing so would not only serve as practical water-saving landscaping practices, but also serve to further the traditional Hawaiian concept of mālama 'āina and create a more Hawaiian sense of place. This would also help to reduce the amount of impervious surfaces in the project area, thereby reducing runoff as well. OHA also recommends tree and landscape planting used to shade parking areas and provide shade and cooling to building elements and outdoor use areas. The final plans for this project should include restoration of the native environment.</u></p>		<p><u>Existing and future planned landscaping will incorporate the use of drought tolerant species as much as possible as a water conservation measure. As applicable, native species will be used and plantings of trees to provide shade for the parking and building areas of the landfill will be provided. The removal of alien species to completely restore the native environment, however, is not considered feasible. As noted in the DEIS, Appendix E, Botanical Resources Report for Alternative Municipal Refuse Disposal Sites on the Island of O'ahu,</u></p> <p><u>"The results of all botanical surveys and searches of pertinent sources of information indicate that there are no special concerns or legal constraints related to botanical resources on any of the proposed sites. Non-native or introduced species of plants clearly dominate the natural vegetation in all areas proposed for landfill use, and the remnants of native vegetation extant on or near these sites consists of generally sparse growth of a limited number of species that remain relatively common in all undeveloped lowlands around O'ahu."</u></p>
<p><u>19. Clifford Lum, Manager and Chief Engineer Board of Water Supply City & County of Honolulu</u></p>	<p><u>7/14/2008</u></p>	
<p><u>19.1 We have no objections to the proposed project.</u></p>		<p><u>We acknowledge that you have no objections to the proposed project.</u></p>
<p><u>20. Steve Y.K. Chang, P.E., Chief Department of Health, Solid Waste Section State of Hawai'i</u></p>	<p><u>7/15/2008</u></p>	
<p><u>20.1 In our comments on the Waimanalo Gulch Landfill Expansion Preparation Notice, the SWS noted its concern over the designated 100-foot buffer on the boundary with the proposed Makaiwa Hills residential development. In your letter of May 12, 2007 you noted nuisance control measures to be implemented along that border in addition to the 100-foot buffer without actually increasing the size of the buffer zone.</u></p> <p><u>We maintain our position that the 100-foot buffer is inadequate to sufficiently ameliorate landfill impacts on the proposed residential development and instead recommend a 750 to 1,000-foot buffer. Such a buffer would be more effective in containing the impacts of landfill activities within the facility boundaries.</u></p>		<p><u>The 100-foot buffer was initially suggested to us as a minimal buffer to provide for mitigation of potential nuisances. In some instances an increased area of buffer may be warranted to allow for landscaping and other mitigative control measures. This area of buffer however, should not be arbitrarily assigned given that grading and excavation will be required to establish cells and other structural elements of the landfill.</u></p> <p><u>In these instances, while some earthwork will be required within proximity to the 100-foot buffer, the completion of this initial work will make possible two important features: (1) the establishment of proper landfill slopes will make possible the implementation of improved mitigative control measures such as landscaping, such that the area of buffer would exceed the minimum 100-feet, e.g., landscaping is expected to be facilitated on newly excavated soils rather than the existing unworked soils; and (2) the area of landfill use will be maximized thereby promoting the efficient use of the site.</u></p>
<p><u>20.2 Table 4-1, page 4-1. The DOH recommends amending this table to reflect expansion and soil usage estimates for MSW and ash cells separately.</u></p>		<p><u>The detailed configuration and location of the individual MSW and Ash cells within the expansion area are identified in the DEIS. The soil usage estimates for construction of these cells will be dependant on the final field configuration of the individual MSW and ash disposal cells. While these specific estimates of use are not known at this time, it should be noted that the amount of excavated material produced during the expansion will result in a surplus of available cell construction and daily cover material.</u></p>

Commenting Party/Itemized Comments	Date of Letter	FEIS Section Reference and Comments*
<p><u>20.3</u> Section 5.4.1, page 5-11. Figure 5-3. Surface Water Plan: Figure 5-3 shows the Western Drainage System with the detention basin above the present landfill. The accompanying discussion indicates that this depiction is applicable for the preferred expansion. This is incorrect and would leave a question as to whether or not a detention basin is still being contemplated. The DOH recommends a later version of the Western Drainage System be used that reflects the deletion of the detention pond.</p>		<p><u>Thank you for noting this error. A correct copy of the surface water control system will be provided in the forthcoming Final EIS for this project. As you have noted the detention basin has been deleted.</u></p>
<p><u>21. Kirk S. Tomita, Senior Environmental Scientist</u> <u>Hawaiian Electric Company</u></p>	<p>7/16/2008</p>	
<p><u>21.1</u> Engineering/Transmission & Distribution Division (Hsun Jou, 543-7527). HECO has existing overhead facilities within the subject property and will require continued access for maintenance purposes.</p> <p><u>Should it become necessary to relocate HECO's facilities, please immediately submit a request in writing and we will work with you so that construction of the project may proceed as smoothly as possible. Please note that there may be costs associated with any relocation work, and that such costs may be borne by the requestor. Because any redesign or relocation of HECO's facilities may cause lengthy delays, upon determination that HECO facilities will need to be relocated, HECO should be notified immediately in order to minimize any delays in or impacts on the project schedule.</u></p> <p><u>We appreciate your efforts to keep us apprised of the planning process. As the project progresses, please continue to keep us informed. We will be better able to evaluate any effects on our system facilities further along in the project's development. We request that development plans show all affected HECO facilities, and address any conflicts between the proposed plans and HECO's existing facilities. Please forward the pre-final development plans to HECO for review.</u></p>		<p><u>We acknowledge your comments and need for continued access to overhead facilities. Although the relocation of HECO facilities is not anticipated and will not be required at this time, any future requirements will be coordinated with HECO. The prefinal plans for the proposed project will be submitted to you for review.</u></p>
<p><u>21.2</u> Engineering/Telecommunications Section (Dixon Lau, 543-7543). Section 6.4.1. Power and Communication Facilities (p. 6-12) of the DEIS states, "A separate easement crossing the present landfill access road is also held by HECO for periodic maintenance of the overhead lines." The document is not definitive as to whether this easement is the same easement used by HECO to gain access to its existing telecommunications facility at Kahe Point near Battery Arizona. The easement for this access crosses over Ash Cell 4, Ash Cell 5, MSW Cell 48 and MSW Cell 5. This telecommunications facility provides critical communications interconnectivity for our Kahe Power Plant to the rest of the HECO system. As such, access to the site is required year-round, 24/7. We would appreciate that this concern be addressed in the final EIS.</p> <p><u>Please keep us informed in the same manner as requested above by our Transmission & Distribution Division. We request that the development plans reflect and highlight any conflicts that will affect access to our Kahe Point telecommunications facility.</u></p>		<p><u>We appreciate this point of clarification concerning your easements near Battery Arizona that also cross the Ash and MSW cells. This will be addressed in Section 6.4.1. Power and Communications Facilities, in the FEIS. Project activities that have the potential to affect the Kahe Power Plant facility will also be coordinated with your Engineering Department.</u></p>
<p><u>21.3</u> Engineering/Structural Division (Roy Noda, 543-7067). The planned expansion is further mauka of the existing landfill and near the top of the ridgeline, which will impact our Kahe Power Plant as follows: (i) airborne debris from wind gusts will carry over the ridge and come down on HECO's 138kV Switching Station and other plant facilities; and (ii) the bird population may grow and result in increased nesting and littering problems within the plant facilities.</p>		<p><u>We acknowledge your comment and will address these concerns in the Final EIS. In general, the control of windblown litter will continue to be addressed as provided in Section 4.2.3. Environmental Controls, subsections on Litter and Cover Soil, in the FEIS. The control of birds will also continue to be provided by promoting the immediate covering of odorous waste with soil cover to discourage foraging. While current efforts have been effective it is recognized that continued diligence will be necessary to maintain the safety of the Kahe Power Plant facility.</u></p>
<p><u>21.4</u> Construction & Maintenance (Paul Nakaqawa, 543-7062). We will need continued access to our facilities for maintenance purposes, as covered by our existing easement(s). Should relocation or additional facilities be required, a formal request should be submitted and coordinated through appropriate HECO department(s).</p>		<p><u>We acknowledge the existing easements and need for access for maintenance purposes. Should any future relocation or additional facilities be required a formal request will be submitted to the appropriate HECO departments by the City or operator.</u></p>

Section 2
Project Background

2.1. Project Background

The Waimānalo Gulch Sanitary Landfill (WGSL) is an essential and necessary City & County of Honolulu facility that provides municipal and solid waste disposal for all the communities of O‘ahu. Refuse that is disposed of at the landfill includes Municipal Solid Waste (MSW); recycling residue; and, Honolulu Program of Waste Energy Recovery (H-POWER) ash and residue. The landfill has been in operation since 1989 and has capacity remaining with the unused 92.5 acres of the approximately 200 acre site for an estimated minimum life of approximately 15 years¹. This period of use is expected to increase as the City's recycling efforts and use of proven alternative technologies divert more materials from landfill disposal. However, even with the present adoption of new technology based solutions and increased use of recycling, WGSL will remain a vital and key part of the City's waste management system.

The proposed project to expand the use of the Waimānalo Gulch Sanitary Landfill will extend the use of the site beyond November 1, 2009², the date after which the amended State Special Use Permit prohibits its further acceptance of solid waste.

This section provides the background of the project including the events that have influenced and affected the City's determination that an extension of use of the site for landfilling is required. A summary of the current situation, compliance violations, historical background of the State Special Use Permit, future City plans for refuse management, and prior Chapter 343, HRS, documents filed for WGSL are provided.

¹ Based on no unforeseen circumstances including natural or other disasters that would require disposal of clean up or recovery related debris. In such an event space at the landfill could be exhausted sooner.

² In March 2008, the State Land Use Commission approved the extension of time for the State Special Use Permit extending the use of the current area of landfilling from May 1, 2008 to November 1, 2009.

2.2. Events Affecting the Decision to Expand Waimānalo Gulch

On ~~December 24, 2002~~ January 10, 2003, the Final Supplemental EIS (FSEIS) for a 14.9 acre expansion of the Waimānalo Gulch Sanitary Landfill was ~~approved~~ accepted. The FSEIS supported the expansion of the site from 86.5 acres to 101.4 acres. The final landfilling of the last cell was planned to be completed at the end of 5 years based on statements of the prior city administration, from the initial use of the expansion area to accept waste.

On June 9, 2003, a State Special Use Permit (SUP) application for the expansion area was approved. The SUP application identified the specific area requirement at 21 acres which included the space needed for excavation, storage and stockpiling of daily cover material, and other earthwork necessary to support the landfill. The total expansion area was adjusted to 107.5 acres, and the SUP required that on May 1, 2008, that the landfill would be restricted from accepting any further waste material and be closed in accordance with an approved closure plan³.

Since the filing of the 21 acre expansion was approved in June 2003, the City filed an SUP Amendment requesting an extension of time for use of the site beyond the May 1, 2008 date. A major reason for the request was the capacity remaining within the 21 acres that could still be used for landfilling. In March 2008, the SUP Extension was approved with a new termination date of November 1, 2009.

Four important events have occurred since approval of the FSEIS and the 2003 SUP Extension Amendment that are relevant to the background of this EIS. Difficult issues were addressed by several important elected and appointed officials regarding Oahu's need and requirement for a landfill. These events, however, also point to the difficulty

³ Docket No. SP87-362, Decision and Order Approving Amendment to Special Use Permit For An Amendment to the Special Use Permit Which Established a Sanitary Landfill on Approximately 86.5 Acres of Land Within the State Land Use Agricultural District at Waimānalo Gulch, Hono'uli'uli, Ewa, Oahu, Hawai'i, TMK No. 9-2-3: Portion 72 and Portion 73 (fka TMK No.: 9-2-3: Portion 2 and Portion 13), June 9, 2003.

and infeasibility of selecting a new landfill site to meet the condition of the SUP Amendment and the honoring of the commitment by the prior administration that the site would be closed in 2008. These events include the proceedings of the Mayor's Advisory Committee on Landfill Site Selection; Council Resolution 04-348; Council Bill 037; and the issuance of two separate notices of violation from the State Department of Health (DOH) and the U.S. Environmental Protection Agency (EPA) over landfill operations at the WGSL.

2.2.1. The Mayor's Advisory Committee on Landfill Site Selection

A Mayor's Advisory Committee (Committee) was formed by the previous City administration to comply with Condition No. 1 of the SUP that required that the Committee recommend a new landfill site to the City Council by December 1, 2003.

The Committee was comprised of 15 members selected by the prior mayor from various communities on O'ahu. The Committee deliberated between June and December 1, 2003.

A major concern of the Committee during its deliberations involved the prior City administration's commitment to close the existing Waimānalo Gulch Sanitary Landfill in five years, or by 2008, without regard to the fact that it had remaining capacity. The Committee chose to consider a possible expansion of Waimānalo Gulch in its deliberations. The Committee developed and used a double blind methodology to consider its ranking of the potential sites. This methodology meant that the Committee members were not aware of the identity of the sites being ranked and the consultant also was not allowed to see the identity of the sites as they applied the weighted criteria adopted by the Committee. The result of this process was that the Waimānalo Gulch Expansion was identified as the highest ranked site. This led to a division in the Committee which resulted in the decision-making process being changed from a consensus to a voting basis. This led to the resignation of four of the members of the Committee and a change in the decision making process to decision making by vote. With the resignation of four of the members of the Committee, the Waimānalo Gulch

site was unanimously removed from the list of sites under consideration. The final action of the Committee was concluded with the delivery of its report to the City Council on December 1, 2003.⁴

The final Committee recommendation included four potential landfill sites and other recommendations for future consideration by the City and Council. The four sites were: Ameron Quarry; Mā'ili Quarry; Makaiwa Gulch; and Nānākuli B. Other Committee recommendations were that: (1) the City Administration and City Council should not zone or permit any site unless a Host Community Benefits package is negotiated with the affected community where a landfill is sited; and, (2) the City is encouraged to land bank sites to reduce the potential for future land use conflicts when another landfill is needed.

2.2.2. Council Resolution 04-348, CD1, FD1, Selecting a Site for a New City Landfill

On December 1, 2004, Resolution 04-348, CD1, FD1, calling for the selection of the Waimānalo Gulch Landfill as the new landfill site was adopted by the City Council. The purpose of the resolution was to address a requirement of the approved SUP Amendment calling for the Council to render a decision on the selection of a new landfill site by December 1, 2004⁵.

In preparing for the resolution, the Council's Committee on Public Works and Economic Development (PWED) submitted its Summary Report on its Findings During its Landfill Site Selection Process, November 16, 2004. Potential landfill sites reviewed included Ameron Quarry; Mā'ili Quarry; Makaiwa Gulch; Nānākuli B; and Waimānalo Gulch. Information concerning these sites was obtained from the Department of Environmental Services (ENV), the Mayor's Advisory Committee Report, landowners and lessees, other departments and agencies, and the public. As a part of its deliberations the PWED

⁴ Report of the Mayor's Advisory Committee (Blue Ribbon Committee) on Landfill Site Selection, December 1, 2003, City & County of Honolulu, Prepared by the Committee's Report Subcommittee, Pacific Waste Consulting Group and R.M. Towill Corporation.

⁵ On April 1, 2004, the LUC approved an amendment to extend the deadline for the City Council to select a new landfill site from June 1, 2004 to December 1, 2004.

Committee held two public meetings, one in Windward and one in Leeward Oahu, attended by well over a hundred concerned citizens.

The Summary Report did not include recommendations for a specific site, but provided background information for the PWED Committee and Council. It noted that regardless of which site was selected that it would have to go through the EIS process and comply with all Federal and State landfill siting requirements. Environmental concerns raised at that time would need to be addressed during the EIS process.

The notes to the Summary Report indicated that originally,

"Waimanalo Gulch was not included as a recommended site in the final report of the Mayor's Blue Ribbon Committee on Landfill Site Selection. The Office of Information Practices then ruled that this final report was void due to violations of the sunshine law which occurred when the Waimanalo Gulch was taken off the recommended list. The PWED Committee, out of respect for the OIP's decision and in order to preserve the open process had included the Waimanalo Gulch as one of the options available for the next landfill site."

The Summary Report and Council Resolution 04-348, CD1, FD1, adopted following the Report, noted that while the Council must select a landfill site, it recognizes there are promising new methods and processes to reduce the amount of municipal solid waste going into a landfill. The Council resolved that,

"...the city must employ sustainability concepts in the handling of its municipal solid waste so that the maximum recyclable materials, energy and alternative products are extracted before any waste is placed in our landfills; and", "...that the council will work with the incoming mayor and his administration to devote all available resources to ensuring the maximum use of recycling and the development of alternative technologies for disposal of municipal solid waste with the intention to effectively eliminate, to the extent possible, the need for a landfill by 2008;" and,

"... in accordance with the conditions set forth by the state land use commission, that the Waimanalo Gulch site is selected as the site for the city's landfill because:

(1) The site currently has over 15 years capacity left with further expansion, and this capacity can be further extended should the city be successful in reducing the amount of waste currently entering the landfill through recycling and the use of new technologies;

(2) The city already owns the property and the infrastructure is already in place, making the site the most economical and least expensive to develop and maintain as a landfill;

(3) Other sites will require a large capital outlay by the city to acquire the land through condemnation and to develop and construct the site and required supporting infrastructure;

(4) A landfill management contract is already in place for 15 years;

(5) This is the only site where the costs and revenues for a landfill are known factors; and

(6) The current landfill operator is committed to implementing necessary improvements to landfill operations to address community concerns regarding visual impact, odors, airborne waste, litter and dust control;"

The resolution concluded with a request that the City Administration immediately contact the Planning Commission, the State DOH, and the LUC to satisfy any necessary requirements for the use of the selected landfill site; and, the transmittal of

the resolution to the State LUC, DOH, the Mayor, the Managing Director, ENV, and the City Planning Commission.

2.2.3. Mayor's Message 037, Calling for a Veto of Bill 37 (2005), CD2

Council Bill 37 (2005), CD2, was prepared by the City Council to address solid waste and ensure compliance with (1) the provisions of Chapter 342G, HRS, relating to solid waste, and (2) the previously approved SUP permit for the use of Waimānalo Gulch Sanitary Landfill until May 1, 2008. The bill passed the third reading of the Council on February 15, 2006. In particular, the Bill 37 provisions noted,

"SECTION 2. Section 9-1.1 ("Findings—Determinations—Goals"), Revised Ordinances of Honolulu 1990, is amended by amending subsection (a) to read as follows:

(a) The council of the City and County of Honolulu (the "city") makes the findings and determinations set forth in this section:

(7) Waimanalo Gulch Landfill.

(A) After May 1, 2007, it is in the best interests of the city and its residents to permit the disposal into the Waimanalo Gulch landfill of only: (i) processed solid waste; (ii) any other material of a nonhazardous nature that cannot be converted into processed solid waste solely because such a conversion method does not exist; and (iii) any non-hazardous material that must be disposed of to protect the health and safety of the public due to an emergency or disaster declared by the council. After May 1, 2008, it is in the best interests of the city to comply with the state land use commission's special use permit granted to the city, the terms and conditions of which require that no additional waste be deposited at that facility and that the facility be closed in accordance with an approved closure plan.

(B) In addition to facilitating the city's compliance with its special use permit granted by the state land use commission, the disposal parameters established in paragraph (A) are needed to: (i) eliminate litter, odor, and vector problems in

the area surrounding the landfill caused by the disposal at the landfill of refuse and other types of municipal solid waste: (ii) alleviate the aesthetics problem to some degree; and (iii) set the city on the path towards: (aa) operating and maintaining disposal facilities capable of reducing the volume and complexity of refuse and other solid waste prior to landfill disposal; (bb) intensifying the effort to recycle or reuse solid waste that cannot be combusted, gasified, or vitrified: and (cc) exploring other means to address solid waste disposal.”

And,

"SECTION 4. Section 9-1.7, Revised Ordinances of Honolulu 1990, is amended to read as follows:

Sec. 9-1.7 Acceptable and nonacceptable refuse and other solid waste at disposal facilities.

(g) After May 1, 2007, the director shall permit the disposal into the Waimanalo Gulch landfill of only:

(1) Processed solid waste;

*(2) Any other material of a non-hazardous nature that cannot be converted to processed solid waste solely because such a conversion method does not exist:
and*

(3) Any non-hazardous material that must be disposed of to protect the health and safety of the public due to an emergency or disaster declared by the council.

Material produced from the recycling or processing of refuse or other solid waste may be used to cover processed and other solid waste disposed of at the landfill.

(h) After May 1, 2008, the Waimanalo Gulch landfill shall be closed.”

Section 5 of the Bill further directed the City to submit to the Council by December 31, 2006, its plan to comply with the ordinance and noted that at a minimum, the City administration shall include in the plan the strategies for and costs of compliance.

On February 28, 2006, the Mayor having reviewed and evaluated the contents of Bill 37, vetoed it citing that it would "cripple" the City's ability to responsibly carry out its municipal solid waste obligations since the expiration of the SUP permit would mean that the City could no longer legally use the Waimānalo Gulch landfill. Mayor's Message No. 037, dated February 28, 2006, noted:

"...given the indisputable facts that (1) the City cannot have a new landfill in operation by May 1, 2008, and (2) for the foreseeable future, the City needs a landfill on island,⁶ the Bill's requirement that the Waimanalo Gulch landfill be closed after that date exposes the City to an untenable choice in 2008 between (1) continued illegal operation of the landfill, thereby subjecting the City to possible regulatory fines, injunctions, and other lawsuits, or (2) the cessation of any landfill activity, which will mean no collection of municipal solid waste, island-wide. Neither alternative is acceptable to me, nor to you and your constituents. As such, Bill 37, C.D. 2, cannot be allowed to become law."

And,

"...even if a new landfill site is selected this year, the reality of our current situation is that the City will not be able to cease use of the Waimanalo Gulch landfill by May 1, 2008. The planning, permitting and construction of an alternate landfill location will take longer than the two years remaining before that deadline. Other alternatives such as shipping off-island or new technologies have many issues, familiar to the Council, which will not be resolved before May 1, 2008. However reluctantly, the City must therefore seek to extend the permits for operating the Waimanalo Gulch landfill in any event. If Bill 37, C.D. 2, becomes

⁶ "We are not aware of any company that has obtained USDA approval to ship waste off-island, nor are we aware of any technology that can eliminate our solid waste without residue that needs disposal." Mayor's Message No. 037, February 28, 2006.

law, please understand that the City would be prohibited by its own law from pursuing regulatory approvals to operate the Waimanalo Gulch landfill beyond 2008, even for extensions of a limited duration or scope. Consequently, we will be further hampered in our efforts to resolve this difficult and long-standing matter."

Mayor's Message No. 037 identified a number of actions taken to address and improve management of the solid waste all of Oahu's citizens and visitors produce, including the search for an alternative site for a new landfill.

"In addition to all these efforts, I was personally committed to reexamining the city's options for locating a new municipal landfill to ensure that no viable alternative sites had been overlooked. In both the final report of the Mayor's Blue Ribbon Panel in 2003 and the 2004 updated Solid Waste Integrated Management Plan, five of the eight final sites evaluated were on the Waianae Coast. I have consistently stated that it is patently unfair for the Leeward Coast to be the sole repository for the island's opala.

...we reexamined all the potential landfill sites on this island, trying to determine if there were realistic options elsewhere on Oahu. We looked at Kapaa Quarry on the Windward side, and had discussions with Ameron, which operates the quarry there. We looked at Poamoho Gulch on the North Shore. We looked hard at all the possible sites that would enable the City to relocate its municipal landfill operations and thereby bring a measure of fairness to the Leeward Coast. Ultimately, none of those sites was without serious impediments.

Regrettably, we are compelled to reaffirm the conclusion reached by the Council in Resolution No. 04-348, C.D. 1, F.D. 1, that the Waimanalo Gulch landfill is the most viable, least expensive alternative for the citizens of Honolulu beyond May 2008."

In closing, the message noted that while a landfill is of vital necessity on Oahu, that a reduction of this dependency requires the efforts of both the City and the Council.

"It is clear that reducing the need for a landfill remains a goal of my Administration and the Council, but we will need your cooperation to advance that goal. I ask your cooperation in working with my Administration to deal with the solid waste disposal challenge in a constructive manner for the benefit of all our constituents."

The content of Mayor's Message 037 established the reason for the veto of Council Bill 37, and the selection of Waimānalo Gulch. However, the events involving the Mayor's Advisory Committee, Council Resolution 04-348, and the veto, do not obviate the requirements of Hawai'i's Environmental Impact Statement law and regulation, Chapter 343, Hawai'i Revised Statutes (HRS), and Chapter 11-200, Hawai'i Administrative Rules (HAR). The preparation and filing of the subject EIS is intended to address these requirements.

2.3. Environmental Compliance Violations

Notices of violation over the operation of the WGS� were issued by the State DOH on January 31, 2006, and the U.S. Environmental Protection Agency (EPA) on April 4, 2006. While it is acknowledged that this occurred because of delays in implementing the required regulatory controls, procedures were in place to ensure proper notification to the State DOH and EPA regarding the operational performance of the landfill. At no time was the public at any risk due to this delay in implementation.

The following provides a summary of the DOH and EPA notices and current efforts that are underway to address the notices.

2.3.1 State Department of Health

The DOH NOV and Order, Docket No. 05-SHW-SWS-004, cited eighteen alleged violations of state law pursuant to Hawai'i Revised Statutes (HRS), Section 342H-7, and Hawaii Administrative Rules (HAR), Chapter 11-58.1, Solid Waste Management Control Rules (**Appendix A**). The following is a summary of the eighteen counts:

Count I - Exceedance of permitted grades

Count II - Failure to submit annual operating reports in a timely manner

Count III - Failure to place daily cover on the active face of MSW landfill

Count IV - Failure to place intermediate cover material on the ash monofil

Count V - Exceedance of leachate head on the liner in ash monofill

Count VI - Exceedance of leachate head on liner in MSW Cell E-1 sump

Count VII - Failure to measure leachate levels and to maintain records on leachate levels in cell 4B sump

Count VIII - Failure to measure leachate levels and to maintain records on leachate levels in the ash monofill sump

Count IX - Failure to notify DOH of noncompliance on equipment blockage in MSW Cell 4-B leachate lateral line and inability to measure leachate levels

Count X - Failure to notify DOH on noncompliance in a timely manner on the exceedances of permit grades and submission of the annual operating reports

Count XI - Unauthorized storage of material on the ash monofil

Count XII - Failure to manage and ban the acceptance of special waste

Count XIII - Failure to maintain records and record location of asbestos disposal at the landfill

Count XIV - Failure to cover a dead animal

Count XV - Failure to submit annual surface water management plan

Count XVI - Failure to control the generation of dust from vehicular traffic

Count XVII - Failure to minimize free litter generation in the landfill

Count XVIII - Failure to monitor explosive gases and maintain monitoring records

Of the eighteen counts in the NOV, sixteen were already corrected when the NOV was issued. One of the other two counts (Count VII, failure to measure and maintain records

of leachate levels in one sump due to a blockage caused by broken equipment) was resolved through final installation of the required equipment on September 27, 2007.

The remaining count (Count I, exceedance of permitted grades) was addressed through the submission of an application to the DOH for a permit modification to increase the maximum final grades of the ash monofill. The application was submitted in February 2006 and a draft solid waste management permit, authorizing an increase in the height of the ash monofill up to 275 feet above msl, was issued by the DOH in November 2007 with input from WMH and the City. Public comments were solicited and a public hearing on the draft permit modification was held on December 11, 2007. ~~The permit modification was approved by the DOH.~~ After extensive review and a stability analysis, the grade modification was approved by the DOH on February 20, 2008.

On December 7, 2007, WMH, the City and DOH signed a settlement agreement which fully and finally settled all issues arising from and related to the NOV. The settlement agreement mandates corrective actions and new compliance requirements regarding:

1. screening of waste
2. groundwater and leachate monitoring
3. daily cover
4. weekly cover
5. cover of inactive ash and MSW areas
6. leachate collection sump and discharge riser
7. removal of leachate from the landfill
8. grade survey control markers
9. an asbestos management and disposal plan
10. perimeter gas monitoring

In addition, the settlement agreement requires either the (a) payment of \$1.5 million in cash to the DOH, or (b) payment of \$520,000 in cash to DOH, a contribution of \$637,500 to a supplemental environment project fund to benefit the Leeward Coast or

other areas on Oahu, and construction of a community solid waste/recyclable drop-off center near the WGSL scale house costing at least \$450,000. The settlement agreement concludes the DOH NOV and the associated contested case which was dismissed.

As a result of the NOV and new regulations and requirements, additional provisions have been included in the revised landfill solid waste operating permit. The DOH has greatly increased the frequency of site inspections and review of the required operating documents submitted for the project. For example, a ground survey is performed on a bi-monthly basis to compare existing grades with approved grades. DOH enforces these provisions and determines the frequency of its inspections.

City ENV staff is in constant contact with WMH to address issues that may arise on a daily basis. City staff initially screens the refuse when refuse delivery vehicles arrive at the WGSL scale house. WMH does further screening as the waste is disposed of at the working face of the landfill. The City co-authors or receives copies of all reports submitted to the DOH.

2.3.2. U. S. Environmental Protection Agency

On April 5, 2006, the EPA announced by press release that Waste Management of Hawai'i, Inc. (WMA) and the City & County of Honolulu (CCH) were alleged to have violated certain provisions of the Clean Air Act at the WGSL. A summary of the violations indicated the following (**Appendix B**) (EPA Press Release, April 5, 2006, Letter from U. S. EPA, Region IX, and Finding and Notice of Violation, Docket No. R6-06-06):

Finding of Violation

8. *The Waimanalo Gulch Landfill is owned by CCH and operated by WMH,*
9. *The Waimanalo Gulch Landfill commenced modification after May 30, 1991.*
10. *Beginning March 12, 1996, the landfill became subject to NSPS Subpart WWW.*

11. On March 12, 1996, the Landfill had a design capacity < 2.5 million megagrams (Mg) and 2.5 million cubic yards (m³).
12. On June 9, 1996, WMH submitted an Initial Design Capacity Report and Initial NMOC [non methane organic compounds] Emission Rate Report (collectively, "Initial Report") for the Landfill to EPA pursuant to 40 C.F.R. §§ 60.757 (a)(1), 60.757(a)(2) and 60.757 (b).
13. The Initial Report for the Landfill, submitted by WMH to EPA on June 9, 1996, is the first report in which the Landfill had an NMOC emission rate > 50 Mg/yr.
14. WMH or CCH was required to either submit a design plan to EPA within 1 year of June 9, 1996, or by June 9, 1997, or perform Tier 2 measurements that show NMOC emissions < 50 Mg/yr and report such results to EPA by December 19, 1996.
15. WMH and CCH failed to submit a design plan to EPA by June 9, 1997.
16. WMH and CCH failed to submit Tier 2 results to EPA by December 9, 1996.
17. WMH and CCH violated Section 111 of the Act, 40 C.F.R. §§ 60.752 (b)(2)(i) and 60.752 (c) by failing to submit a design plan to EPA by June 9, 1997 or submit Tier 2 recalculations to EPA by December 9, 1996.
18. WMH or CCH was required to install a GCCS [gas collection and control system] for the Landfill within 30 months of June 1996, or by December 9, 1998.
19. WMH and CCH failed to install a GCCS for the Landfill by December 9, 1998.
20. WMH and CCH violated Section 111 of the Act and 40 C.F.R. §§ 60.752(b)(2)(ii) by failing to install a GCCS for the Landfill by December 9, 1998.
21. On August 1, 2005, full operation of a GCCS for the Landfill began. However, the GCCS has not complied with, and does not comply with, the design and operation requirements of 40 C.F.R. § 60.752(b)(2). Therefore, WMH and CCH have been in violation, and are considered to be in violation, until WMH and/or CCH establishes continuous compliance with 40 C.F.R. § 60.752(b)(2).

Enforcement

22. Section 113(a)(3) of the Act provides that whenever EPA finds that any person has violated, or is in violation of, any requirement or prohibition of, *inter alia*, subchapter I or V of the Act, including, but not limited to, any requirement or prohibition of any rule promulgated under Sections 111 or 502 of the Act, EPA may,

- *issue an administrative penalty order pursuant to Section 113(d) for civil administrative penalties up to \$32,500 per day of violation, or*
- *issue an order requiring such person to comply with such requirement or prohibition, or*
- *bring a civil action pursuant to Section 113(b) for injunctive relief and/or civil penalties of not more than \$32,500 per day for each violation.*

42 U.S.C. § 7413(a)(3), as amended by Pub. L. 104-134.

Furthermore, for any person who knowingly violates a requirement or prohibition of Sections 111 or 502 of the Act, Section 113(c) provides for criminal penalties or imprisonment, or both. In addition, under Section 306(a), the regulations promulgated thereunder (40 C.F.R. Part 32), and Executive Order 11738, facilities to be used in federal contracts, grants, and loans must be in full compliance with the Act and all regulations promulgated pursuant to it. Violation of the Act may result in the subject facility being declared ineligible for participation in any federal contract, grant, or loan.

WMH and the City have been working closely with the EPA to resolve the EPA NOV, which resulted from self-reporting of the late installation of a landfill gas collection and control system (installed and operational by November 2005). That system is already in full operation at the landfill, and discussions with the EPA have focused on resolving the monetary fines and a final agreement on a plan to address elevated underground temperatures at the landfill, which are higher than normally expected, but which are not indicative of underground combustion conditions (i.e., fire).

Waste Management continues to monitor and evaluate the potential causes of the elevated gas temperatures and has provided documentation to EPA and DOH to demonstrate that the Landfill can be safely operated at these higher temperatures. Waste Management will continue to coordinate appropriate measures to maintain compliance with all regulations as required by law.

2.4. Summary of Current Status

The situation involving the issuance of the NOVs by the DOH (now resolved and settled) and EPA (resolution pending further discussion) have resulted in efforts by the City and WMH to address the concerns raised and to implement improved management reporting procedures to prevent a similar situation from recurring.

To evaluate operations performance, the City hired a third-party engineering consultant to evaluate landfill operations. They concluded that WMH was performing at a satisfactory level. WMH has also contracted with another third-party engineering consultant to evaluate the effect landfill operations may have on neighboring areas and has shared data with the City. The City's staff meets weekly with WMH staff to discuss landfill operations. In addition, the City's Refuse Disposal Engineer is in daily contact with WMH's General Manager regarding operations at WGSL.

The situation involving the continuing need for landfill space since the veto of Council Bill 37, however, has not changed. The present effort by the City to maximize landfilling space that is remaining within the existing permitted WGSL area is anticipated to extend the usable life of the site by approximately one to two years. While this provides for more efficient use of the site, this capacity will eventually become exhausted.

The shortage of space for the disposal of MSW and ash will be addressed by the City by use of the approximately 92.5 acres of the property that remain unused. The potential capacity of this area is expected to allow for a site life of not less than approximately 15 years based on current rates of waste disposal at approximately 1,400 tons per day. This addition of space will be used for the benefit of all the communities of the island of O'ahu.

The planned expansion of the landfill will not be considered alone by the City. The City will continue to utilize all feasible alternative technologies to landfilling, adopt recycling/reuse programs, and use of waste transshipment to support extending the useful life of the site. However, while it is possible to extend the life of the lateral

expansion of the landfill, it is not possible to entirely eliminate the need for a municipal sanitary landfill. Factors that will continue to influence the complete elimination of the landfill include: (1) the need for a site capable of accepting the disposal of emergency debris generated as a result of a natural or man-induced disaster, e.g., hurricane, tsunami, major industrial or public works accident, or act of terrorism; and (2) there are no alternative waste disposal technologies which do not themselves result in the generation of residual material that cannot be further recycled, reused, or otherwise recovered for other purposes. For these types of waste generated in the City & County of Honolulu a municipal sanitary landfill remains the most viable option for disposal.

2.5. Historical Background of the State Special Use Permit

A. 1987 - Special Permit for the establishment of WGSL granted.

On October 17, 1985, the Director of Land Utilization, City & County of Honolulu (now known as DPP), accepted the Final Revised EIS which discussed probable adverse environmental effects and proposed mitigation measures for the establishment of a landfill at Waimānalo Gulch, Honouliuli, 'Ewa, O'ahu, Hawai'i.

On February 4, 1987, the Planning Commission approved the SUP application to establish WGSL on approximately 60.5 acres of land within the Agricultural District, subject to six conditions. The application was submitted by the Department of Public Works, City & County of Honolulu (now known as the Department of Environmental Services [ENV]).

Because the SUP was for land greater than fifteen acres, on April 20, 1987, the LUC also approved the issuance of the SUP to establish WGSL.

B. 1989 - Amendment to SUP to expand WGSL by 26 acres granted.

On July 26, 1989, the Planning Commission approved an amendment to the SUP to expand WGSL by 26 acres. The amendment had been requested because 26 acres had been inadvertently left out of the original SUP. The additional 26 acres was necessary to allow enough land area for the proposed administration building, weighing station, drainage structures and access roads.

On October 31, 1989, the LUC also approved the SUP amendment to expand the existing approved area by 26 acres.

C. 2003 - Amendment to SUP to expand WGSL by 21 acres granted.

On January 10, 2003, the Department of Planning and Permitting accepted the Final Supplemental EIS (FSEIS), which covered a proposed 21-acre expansion of WGSL.

On March 13, 2003, the Planning Commission granted ENV's application to expand WGSL by 21 acres, which, at that time, was projected to extend the life of WGSL by 5 years. The proposed expansion included four cells for disposing MSW (E1 through E4), berms, detention and silting basins, drainage channels and access routes. In its Findings of Fact, Conclusions, and Decision dated March 13, 2003 (the "2003 Planning Commission Decision"), the Planning Commission recommended that ENV submit an alternate landfill site, or sites, to the City Council by December 31, 2003. The Planning Commission did not, however, condition its approval on this recommendation.

With its approval of the 21-acre expansion, the Planning Commission imposed two additional conditions. One of the conditions, Condition No. 10, required ENV to stop accepting waste material within 5 years from the date of the SUP amendment approval or the date of the Solid Waste

Management Permit approval, whichever occurred later, but not beyond May 1, 2008.

On June 9, 2003, the LUC issued its Decision and Order Approving Amendment to Special Use Permit (the "2003 LUC Decision"). The 2003 LUC Decision adopted Condition No. 10 of the 2003 Planning Commission Decision as Condition No. 12 of the 2003 LUC Decision:

"Within 5 years from the date of this Special Use Permit Amendment approval or date of the Solid Waste Management Permit approval for this expansion, whichever occurs later but not beyond May 1, 2008, the 200-acre property shall be restricted from accepting any additional waste material and be closed in accordance with an approved closure plan."

Because the LUC issued its 2003 LUC Decision on June 9, 2003, and Solid Waste Management Permit approval (permit renewal No. LF-0054-02) was issued on May 15, 2003, the SUP Permit was set to expire on May 1, 2008.

The LUC also imposed Condition No. 1, among others, requiring the City and County of Honolulu to select a new landfill site by June 1, 2004, or the SUP would immediately expire on that date.

D. Extension of Deadline to Select a New Landfill from June 1, 2004, to December 1, 2004.

On March 25, 2004, ENV filed a Motion to Amend and/or Stay the 2003 LUC Decision. ENV requested (1) an extension of the deadline to select a new landfill site from June 1, 2004 to December 1, 2004 (i.e., an amendment to Condition No. 1 of the 2003 LUC Decision); and (2) clarification from the LUC as to whether WGSL could be considered by the City Council as one of the available landfill sites.

By Order dated May 10, 2004, the LUC granted ENV's Motion in part. The Commission granted the extension of the deadline to select a new landfill site from June 1, 2004 to December 1, 2004, subject to the condition that the City Council submit monthly progress reports to the LUC to include, among other things, updates on the City's efforts to select a new landfill site and to find alternative technologies to reduce or eliminate landfilling.

The LUC did not, however, issue a decision as to whether the WGSL could be considered by the City Council as one of the available landfill sites because such matter "was not within the jurisdiction of [the LUC]." All other conditions of the SUP remained in effect, including Condition No. 12 which required WGSL to stop accepting waste by May 1, 2008.

E. December 2004 - Resolution Adopted by City Council Selecting WGSL as its future landfill site.

On December 1, 2004, the City Council selected WGSL as its future landfill site.

F. 2008 - Extension of Waste Acceptance Deadline to November 1, 2010.

On July 6, 2007, ENV filed an application with DPP to amend Condition No. 10 of the 2003 Planning Commission Decision and Condition No. 12 of the 2003 LUC Decision, by extending the deadline to accept waste at WGSL from May 1, 2008, to May 1, 2010, or until WGSL reaches its permitted capacity, whichever occurred first (the "Application").

Colleen Hanabusa, Esquire, and Ko Olina Community Association (KOCA) filed petitions to intervene. On November 14, 2007, the Planning Commission held a public hearing at the Mission Memorial Auditorium, City Hall Annex, in Honolulu, Hawai'i. The Planning Commission granted both requests to intervene. The Planning Commission subsequently closed the public hearing and scheduled the matter for a contested case hearing.

On December 7, 2007, the Planning Commission conducted a contested case hearing on the Application at Kapolei Hale, Conference Rooms A and B, in Kapolei, Hawai'i. On January 16, 2008, the Planning Commission granted ENV's Application to amend Condition No. 10 of the 2003 Planning Commission Decision to extend the waste acceptance deadline by two years, or until WGS� reaches its permitted capacity, and issued its Findings of Fact, Conclusions of Law, and Decision and Order (the "2008 Planning Commission Decision"). The Planning Commission recommended that the LUC similarly amend Condition No. 12 of the 2003 LUC Decision.

On January 31, 2008, the LUC received the 2008 Planning Commission Decision and complete record of the Planning Commission's proceedings on the Application. On February 21, 2008, the LUC met to consider the Application. Following the receipt of public testimony, the LUC deferred the matter to its March 6, 2008 meeting. On March 6, 2008, the LUC resumed its meeting on the Application, and recognized Colleen Hanabusa and KOCA as intervenors in the LUC's proceeding based on their intervenor status before the Planning Commission.

On March 7, 2008, the LUC resumed its meeting on the Application. At that meeting, the LUC adopted the Planning Commission's recommendation with an amendment to waste acceptance deadline from May 1, 2010, to November 1, 2009, with an additional condition requiring ENV to report to the LUC every six months on the actions taken to alleviate further use of WGS�. The LUC issued its Findings of Fact, Conclusions of Law, and Decision and Order adopting with Modifications, the City and County of Honolulu Planning Commission's Recommendation to Approve Amendment to Special Use Permit (the "2008 LUC Decision") on March 14, 2008.

Thus, Condition No. 12 of the SUP now reads as follows:

"The 200-acre Property shall be restricted from accepting any additional waste material and be closed in accordance with an approved closure plan by November 1, 2009, or until the approved area reaches its permitted capacity, whichever occurs first."

G. Appeals by Intervenors

On February 12, 2008, Colleen Hanabusa and KOCA (collectively, "Intervenors") filed a Notice of Appeal to Circuit Court, appealing the 2008 Planning Commission Decision. See Ko Olina Community Association v. Planning Commission, Circuit Court of the First Judicial Circuit, State of Hawaii, Civil No. 08-1-0313 (Agency Appeal). On February 15, 2008, Intervenors filed an Amended Notice of Appeal to Circuit Court, naming the Planning Commission, ENV and DPP as Appellees.

On April 10, 2008, Intervenors filed a Notice of Appeal to Circuit Court, appealing the 2008 LUC Decision. See Ko Olina Community Association v. Land Use Commission, Circuit Court of the First Judicial Circuit, State of Hawaii, Civil No. 08-1-0727 (Agency Appeal). Intervenors named ENV and the LUC as Appellees.

The two appeals were consolidated on June 25, 2008. On October 1, 2008, the Circuit Court heard oral argument from the parties on the consolidated appeals. On October 3, 2008, the court entered its order affirming the LUC's decision in Civil No. 08-1-0727-04, and dismissing as preliminary and not appealable the Planning Commission's decision in Civil No. 08-1-0313-02, but maintaining the consolidated appeals and records on appeal. On October 7, 2008, the court entered an amended order correcting two internally inconsistent errors in its October 1, 2008 order. Final judgment had not been entered as of October 8, 2008.

2.6. City Plans Involving the Future Handling of Solid Waste

Policy guidance on the future management of O'ahu's solid waste for the period beyond the projected life of the WGSL is provided in the City's Integrated Solid Waste Management Plan, which is presently under preparation by R. W. Beck. The schedule for completion of this plan is in early 2009, when it will be reviewed for adoption by the Honolulu City Council. A draft working copy of the plan has identified a number of strategies over the next five year period to help guide solid waste management and development activities (R. W. Beck, 2008). The final plan will identify the City's initiatives for a longer projected period of 20 or more years.

The current status involving the H-POWER expansion and the proposed use of transshipment are included as provided by Pacific Waste Consulting Group, Inc. (PWCG, 2008).

2.6.1. Transfer Stations

The City has completed an evaluation of its transfer stations to identify how current operations could be improved and what would be required to meet future needs at each of the facilities. Between 2009 and 2011, the Keehi, Kawaihoa, and Kapa'a Transfer Stations will be modified to accommodate facility and maintenance upgrades. (R.W. Beck, 2008).

Keehi Transfer Station – In 2009, the City will assess whether to convert this transfer station to a top loading facility. Other planned projects at the Keehi Transfer Station include fuel station renovations which will install an automated electronic card reader system and relocating of the existing fuel station to enable fueling on both sides of the pump. The project is scheduled to be completed by 2010.

Kawaihoa Transfer Station – When the next modification of the solid waste permit application is submitted in 2010, the City will consider requesting an increase in

the permitted capacity for the transfer station to address anticipated growth on the part of the island served by this transfer station.

The planned site improvements will include paved parking, staging, and circulation areas; an extended tipping area with a new green waste receiving bay; a mulch distribution area; new water main; new sewer main; and a new operations building. The 330-square-foot operations building will consist of an office, a restroom, equipment storage, and circulation space. The upgraded transfer station will receive and transfer green waste separately. The primary traffic pattern will not change at the improved facility. The present mulch distribution area is located at the rear of the site and is not easily accessible to residents. The upgraded mulch distribution area will positively change the traffic pattern for residents picking up mulch at the site. The project is scheduled to be completed by 2011.

Kapaa Transfer Station - Expansion of the Kapaa Transfer Station should not be necessary with the present average daily receipt of MSW at less than one half of its permitted design capacity. However, since its age is approaching 20 years old, the facility now requires major repairs and replacements. The project is scheduled to be completed by 2012.

The City will continue to reevaluate the adequacy of processing capacity of its transfer stations to identify any capacity, operational or infrastructure deficiencies, and where required provide for appropriate upgrades or modifications.

2.6.2. Waste to Energy (WTE) Capacity

The City is in process of working with Covanta Energy to add a third unit to H-POWER. When permitted, the third unit will have a capacity of 300,000 tons per year (TPY) and will be a mass burn facility. The existing H-POWER Units #1 and #2 are refuse derived fuel units in which the waste is processed to remove metals and other difficult to

combust materials before incinerating the waste. The new mass burn facility will accept waste without pre-processing and convert it to energy. (PWCG, 2008).

The additional capacity is scheduled for on-line service by 2011. The added capacity is expected to reduce the demand on the existing plant by more efficiently distributing the workload among three rather than two boilers. The lifespan of the H-POWER expansion is expected be in excess of 25 years and will increase the generation of electricity derived from MSW.

The plant is intended to reduce the amount of disposal in the WGS�. It will further reduce the Island of Oahu's greenhouse gas footprint by increasing from five to eight percent the amount of electricity produced from solid waste, a renewable fuel. (PWCG, 2008).

The plant will have an economic life, but it can be upgraded when technical improvements are available. When constructed, it will have emission controls among the best of any energy from waste plant in the country. The plant will be the most modern in operation. As with H-POWER units #1 and #2, future upgrades are expected to keep the plant technologically current and provide needed disposal capacity for the foreseeable future. (PWCG, 2008).

2.6.3. Landfill Capacity

The City is currently processing an EIS for the WGS�. The EIS process is scheduled to be completed by November 2008. Upon acceptance of the EIS, the City will seek all necessary land use permits through a process requiring public hearings.

In 2011, the City will begin the process of identifying a new landfill beyond the capacity of the planned lateral expansion of the WGS�. The reasons for initiating this process early involve: (1) the selection of a new landfill should involve early community consultation and input; (2) a number of factors will need to be considered by the City that involve land use, environmental, and socioeconomic issues; (3) locations that are

available on O'ahu for the siting of a municipal landfill have become increasingly constrained by development pressures that have reduced the availability of alternative locations for a landfill; (4) a municipal sanitary landfill is anticipated to be required for the foreseeable future, e.g., there are no alternative waste disposal technologies which do not themselves result in the generation of residual waste that cannot be further recycled, reused, or otherwise recovered; and (5) the capacity that is provided by a municipal sanitary landfill may be called upon during periods of natural or man-induced disasters.

As much as practicable, the new MSW landfill is intended to avoid areas situated west of Makakilo. A major part of this effort will involve the use of a Landfill Siting Committee in 2011. The Committee will be assigned the responsibility of adopting a similar process used in 2003 to identify the site for a new RCRA Subtitle D MSW landfill. The work of the Committee is anticipated to be completed by 2012. In 2013, the City Council will review the Committee's findings and take action regarding the Committee's recommendation(s).

The lifespan of the future planned landfill will be based on the physical characteristics of the site, the projected rate of waste disposal that is needed, and other factors that involve the integration of the landfill as part of the City's waste management system. At present, the lifespan of WGSL is projected for a minimum period of 15 years.

2.6.4. Waste Transshipment to the Mainland

The City plans to award a contract to a service provider for the baling, shipment, unloading, transportation and disposal of City-provided MSW to a mainland landfill. The process of annually transshipping 100,000 tons of MSW is tentatively scheduled for 2009.

To assure flow control by the City, the service provider will be required to provide the City with sufficient space for the placement of a City-owned scale and scale house, as well as associated equipment and vehicle access. The Refuse Division, ENV, will direct select MSW to the scale house as part of its flow control plan for the City. All waste will

be delivered to the service provider only after it has been accepted and weighed at the City-owned scale facility.

The City only plans to transship waste to the mainland on an interim basis, until adequate WTE capacity becomes available with the scheduled operation of the third H-POWER boiler, tentatively scheduled for on-line service in 2011. (R. W. Beck, 2008).

Current Status of Transshipment

On June 16, 2008, bids were opened for the City's Request For Bids for interim shipping of MSW to the mainland United States. Three bids were received. Three procurement protests were then filed on behalf of the two higher bidders. The City is working to resolve these protests. They are being evaluated with input from various City agencies. After the City issues final rulings on the protests, the parties will have the right to an appeal. Until any such time that the appeals are resolved, the City is prohibited by State law from awarding any contract. (PWCG, 2008).

2.5. ~~Previously Filed Environmental Impact Statement Compliance Documents~~

2.7. Previously Filed Environmental Impact Statement Compliance Documents

Chapter 343, HRS, and Chapter 11-200, HAR, environmental compliance documents have been previously filed for the use of this site. These documents include the: Revised Environmental Impact Statement for the Leeward Sanitary Landfill at Waimanalo Gulch Site and Ohikilolo Site, City & County of Honolulu, March 1984, filed to utilize an area of approximately 60.5 acres for landfilling.

The Revised Draft Supplemental Environmental Impact Statement for the Waimanalo Gulch Sanitary Landfill Expansion, City & County of Honolulu, June 2001, was initially filed to utilize the remaining space of the landfill, but was subsequently revised reducing both the timeframe and the area that would be used in the final published version of this document. See below.

The Final Supplemental Environmental Impact Statement for the Waimanalo Gulch Sanitary Landfill Expansion, City & County of Honolulu, December 2002, was prepared to utilize only a limited area of the landfill that ~~would expire~~ was expected to reach capacity within 5 years, or by 2008. This document was supported by the prior City administration's commitment to begin closure of the site at the end of 5 years.

The Environmental Impact Statement Preparation Notice for the Waimānalo Gulch Sanitary Landfill Expansion, City & County of Honolulu, November 2006, was prepared to utilize the remaining 92.5 acres of the site for a period of not less than 15 years. This document was filed based on the then pending expiration of the SUP on May 1, 2008.

The Draft Environmental Impact Statement for the Waimānalo Gulch Sanitary Landfill Lateral Expansion, City & County of Honolulu, May 2008, was filed for the subject project and published by the OEQC on May 23, 2008. The public and agency comments received from the filing of this document have been used in the preparation of this document.

**Section 3
Introduction**

3.1. Project Location and Area of Use

Waimānalo Gulch Sanitary Landfill (WGSL) is located in Waimānalo Gulch, on the Island of O’ahu. The property is owned by the City & County of Honolulu, and under jurisdiction of the Department of Environmental Services (ENV). The landfill is operated for ENV by Waste Management of Hawai’i, Inc. (WMH).

The landfill became operational in September 1989 and the property comprises an area of approximately 200 acres (**Figure 3-1, Waimānalo Gulch Landfill Property**).

According to records for the project filed with the Department of Planning and Permitting (DPP), approximately 107.5 acres of the site are comprised of used landfill area, operational and maintenance area, internal roadway area, and the current permitted space in use for landfill operations. The remaining acreage of the site comprising 92.5 acres is proposed to be used for the future expansion of the site (**Figure 3-2, Waimānalo Gulch Sanitary Landfill Lateral Expansion Site, Figure 3-3, Waimānalo Gulch Sanitary Landfill Aerial Photograph**). A breakdown of this site acreage is provided in **Table 3-1**, below:

Table 3-1
Existing and Proposed Use of Waimānalo Gulch Property

Acreage	Description
60.5	Used Landfill Area, Scheduled for Closure
20.0	Administrative and Operational Support
6.0	Roadway and Drainage Area Improvements
86.5	Subtotal
21.0	2003 Expansion Area
107.5	Subtotal
92.5	2008 Planned Expansion Area (Approximately ~37 Acres Active Landfill Cells Plus Related Uses, e.g., roads and infrastructure)
200.0	Total Approximate Area of Site

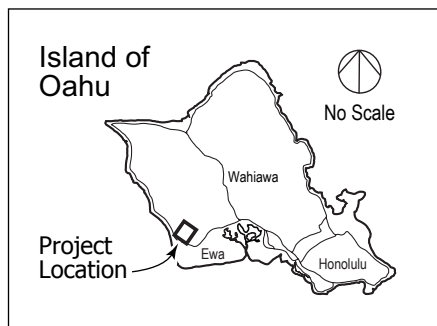
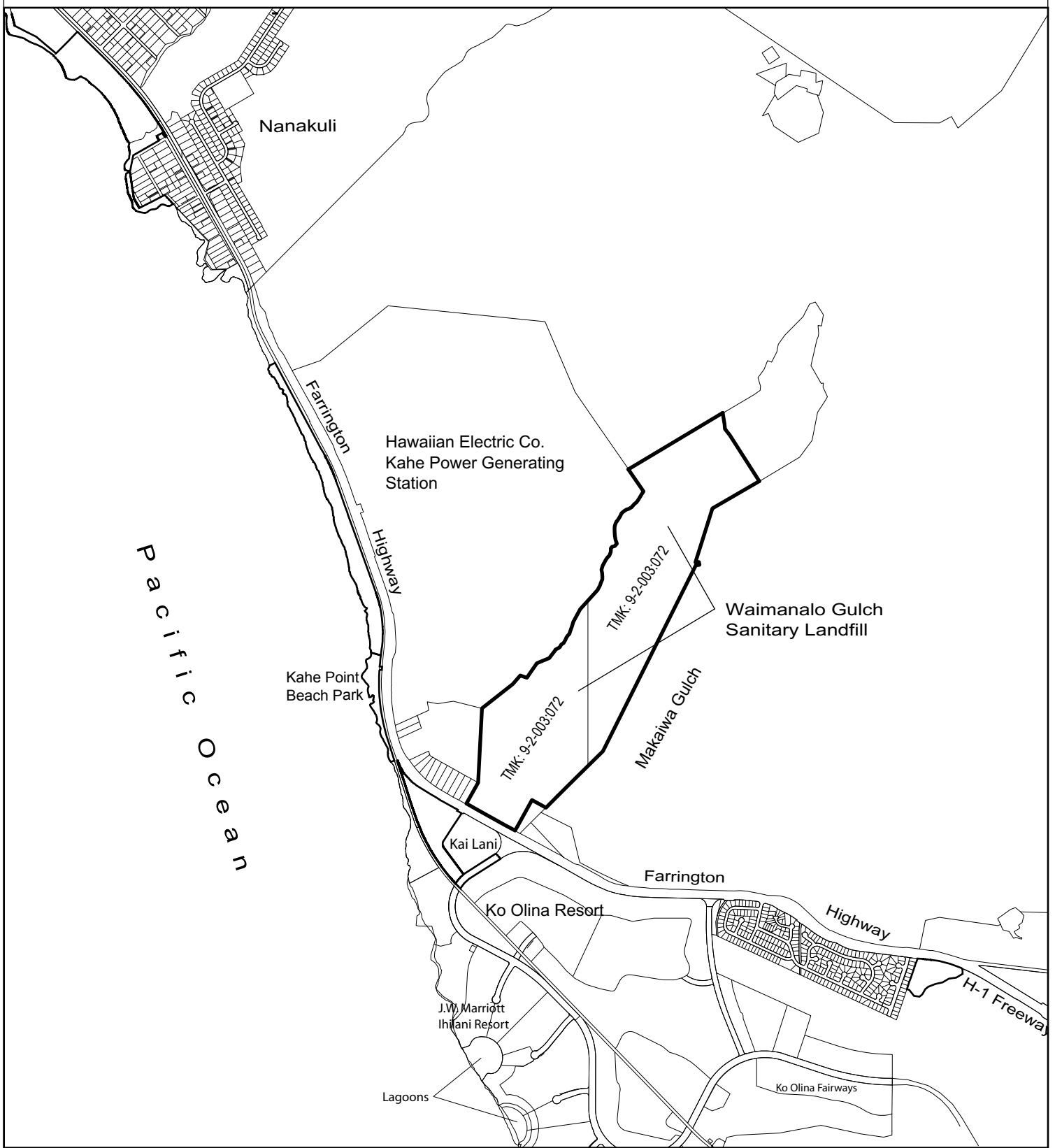


Figure 3-1
Waimanalo Gulch Landfill Property
 Waimanalo Gulch Sanitary Landfill Expansion
 Department of Environmental Services

