LINDA LINGLE
GOVERNOR OF HAWAII

CHIYOME L. FUKINO, M.D.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3378
HONOLULU, HAWAII 96801-3378

In reply, please refer to:
EMD/SHWB

September 5, 2008

S0901JR

CERTIFIED MAIL NO. 7008 0500 0000 3671 9125
RETURN RECEIPT REQUESTED

WARNING LETTER /
REQUEST FOR INFOMATION

Mr. Joseph Whelan, General Manager
Waste Management of Hawaii, Inc.
92-460 Farrington Highway
Kapolei, Hawaii 96707

CERTIFIED MAIL NO. 7008 0500 0000 3671 9118
RETURN RECEIPT REQUESTED

Mr. Eric Takamura, Director
Department of Environmental Services
City and County of Honolulu
1000 Uluohia Street
Kapolei, Hawaii 96707

Dear Messrs. Whelan and Takamura:

SUBJECT: Inspections at Waimanalo Gulch Sanitary Landfill
Solid Waste Management Permit No. LF-0054-02
Kapolei, Oahu

On May 9, 16, and 28, 2008, representatives of the Hawaii Department of Health (DOH), Solid Waste Section (SWS) conducted inspections at Waimanalo Gulch Sanitary Landfill in accordance with Hawaii Revised Statutes (HRS) Section 342H-6. The initial purpose of the inspections was to observe the type of material utilized for the operation layer in Cell E-4. The inspection was expanded to include a drive through and walk through of the MSW and ash monofill areas. Copies of the inspection report along with photographs are enclosed for your review. The report describes the conditions at the facility at the time of the inspection, potential violations and areas of concern.

On May 9, 2008, Mr. Justin Lottig, Environmental Protection Manager, and later joined by Mr. Jesse Frey, Engineer for Waste Management of Hawaii, Inc. (WMH) accompanied the inspectors on the inspection. On May 16, 2008, Mr. Lottig accompanied the inspectors; on May 28, 2008, Mr. Joseph Whelan, District Manager, accompanied the inspectors and provided documents and information related to the ash sump, 4-B sump, and stockpiled material on the top deck of MSW Cell 11 and ash monofill Cell 3.

The following are potential violations identified during the inspections:

The facility has been storing stockpiles of excavated material (rocks and boulders mixed with soil) from the former excavation and construction of MSW Cell E-4 on the top deck of MSW Cell 11 for over 30 days and storing asphalt and concrete slab mixed with soil on the top deck of ash monofill Cell 3, in violation of Special Condition - Section D, Item 10. Please note that WMH was fined for a similar violation (unauthorized storage of material) during the last Notice and Finding of Violation. Based on a May 9, 2008 topographic map, it also appears that the permitted grades in MSW Cell 11 were exceeded during the temporary storage of excavated material.

The facility failed to submit a written request for the temporary storage of excavated material on the top deck of MSW Cell 11 and the storage of asphalt and concrete slab mixed with soil on the top deck of ash monofill Cell 3 in violation of Special Condition - Section D, Item 11, a & b.

The facility failed to submit a written request for other activities (operation of screener) on MSW Cell 11 and for commencing operations without written approval from the department in violation of Special Condition - Section D, Item 11. We believe that the previous unauthorized storage and crushing activities, which was one of the violations identified in the previously issued Notice and Finding of Violation was one of the causes that lead to inadequate storm water management and large leachate generation.

Your solid waste permit requires that all leachate systems maintain an elevation control point at the top of the casing or any other monument in the immediate vicinity of the sump, for the measurement of leachate in the sump. The elevation control point shall be surveyed on an annual basis and clearly marked. The facility is in violation of Special Condition - Section I, Item 4 for not having elevation control points.

The facility failed to submit written notification of the exceedance and verification of methane gas monitoring results to the department within seven (7) days and is unaware of any other actions taken in response to these findings, in violation of Special Condition - Section H, Perimeter Gas Management, Item 7.

Please perform necessary corrective actions to rectify the listed potential violations. In addition, please provide the following information. Please submit the information within thirty (30) days of receipt of this letter.

According to WMH, the transducers at both the ash sump and 4-B sump are being repaired since there are discrepancies between bubbler and transducer readings. Please submit a repair schedule and notify DOH when the monitoring systems are repaired. In accordance with Special Condition – Section I, item 9.c, please take manual measurements at least once per week until all components of the automated system (bubbler and transducer) are working properly. However, measurements shall be taken every day if the compliance level has been exceeded.

Please provide the volume of stockpiled material containing asphalt, concrete slab mixed with soil, the length of time the material has been stored at the ash monofill Cell-3, and schedule for removal/use of the material.

Please provide the approximate volume of excavated material stored at MSW Cell11, the length of time the material has been stored on site, and schedule for removal/use of the material.

Please provide documentation of intermediate cover depth, as well as periodic inspections, as required by Special Condition - Section D, Items 10.d and11.a.iii. until the stockpiles have been removed.

If WMH plans to continue with the temporary storage and screening of excavated material at MSW Cell 11, please submit a written request as specified in the facility's permit with all specific requirements.

Any deficiencies, which may be noted in this letter or the enclosed inspection reports, are not necessarily inclusive and any omissions shall not be construed as a determination of compliance with any applicable laws. Also, any omission to cite other violations is not intended to nor shall be binding upon the DOH.

The DOH reserves the right to take enforcement action as deemed appropriate. If the department determines that the permittee has violated or is violating any provision of HRS §342H, HAR §11-58.1, or Special Condition – Section S, the department may pursue enforcement actions in accordance with HRS §342H-7, Enforcement; §342H-9, Penalties; §342H-10, Administrative Penalties; §342H-11, Injunctive and other relief; or any other pertinent rules.

We look forward to receiving your written response within thirty (30) calendar days from the receipt of this letter as to what actions will be taken to correct the deficiencies noted above.

Should you have any questions, please contact Mr. Jose Ruiz of the Solid and Hazardous Waste Branch at (808) 586-4226.

Sincerely,

THOMAS E. ARIZUMI, P.E., CHIEF
Environmental Management Division

Enclosures

c: Kathleen Ho, Deputy Attorney General
Laurence Lau, Deputy Director for Environmental Health

DEPARTMENT OF HEALTH
SOLID AND HAZARDOUS WASTE BRANCH
OFFICE OF SOLID WASTE MANAGEMENT
919 ALA MOANA BOULEVARD, ROOM 212
HONOLULU, HAWAII 96814
TEL. NO. 586-4226 FAX NO. 586-7509

INSPECTION REPORT

FACILITY NAME: Waimanalo Gulch MSWLF and Ash Monofill

INSPECTION DATE: May 9, 16, and 28, 2008

PERMIT NUMBER: LF-0054-02

ISSUED DATE: February 20, 2008

EXPIRATION DATE: April 30, 2008

PERMIT RENEWAL APPLICATION SUBMITTED: September 21, 2007

PERMIT MODIFICATION APPLICATION SUBMITTED: N/A

COMPLETE APPLICATION SUBMITTED: March 14, 2008

MAILING ADDRESS: Mr. Joseph Whelan, District Manager
Waste Management of Hawaii, Inc. (WMH)
92-460 Farrington Highway, Kapolei, Hawaii 96707

LOCATION ADDRESS: 92-460 Farrington Highway
Kapolei, Hawaii 96707

PERSONS CONTACTED: Mr. Joseph Whelan, District Manager & VP
Jesse Frey, Market Area Engineer
Justin Lottig, Environmental Protection Manager (EPM)

TELEPHONE NO.: 808-668-2985

INSPECTORS AND TITLES: Jose Ruiz, EHS, Janice Fujimoto, Gary Siu and Thomas Miyashiro, Engineers

REPORT DATE: June 2, 2008

REASON FOR INSPECTION:

( ) ROUTINE
( ) COMPLIANCE SCHEDULE
( ) PERMIT REQUIREMENT
( ) VARIANCE CONDITION
( ) COMPLAINT EXPLAIN:
(X) OTHER EXPLAIN: To inspect material used for operations layer in cell E-4

OBSERVATIONS / FINDINGS:

On May 9, 2008, Department of Health, Solid Waste Section (SWS) inspectors, Jose Ruiz and Janice Fujimoto, Engineer, initially visited the site to inspect the material used for the operation layer, stockpiled on MSW Cell E-4. The site visit was prompted by a daily photograph of the active workface, dated May 5, 2008 (see photograph 1), and submitted by WMH, which shows stockpiles of operation layer material within MSW Cell E-4. In addition, the facility reported having methane concentration exceedance in gas probe GP-8, since April 25, 2008. This inspection was expanded to include a drive through and walk-through of the MSW and ash monofill areas. Mr. Justin Lottig, facility's Environmental Compliance Manager, accompanied the inspectors during the inspection and provided information and documents requested. Mr. Jesse Frey joined the inspectors in the middle of the inspection. Gary Siu was not allowed by WMH to join in on the inspection and remained at the main office.

On May 16, 2008, Jose Ruiz, Janice Fujimoto, and Thomas Miyashiro, performed a follow-up inspection and were accompanied by Mr. Justin Lottig. On May 28, 2008, Jose Ruiz, Janice Fujimoto, Thomas Miyashiro, and Gary Siu performed another inspection and were accompanied by Mr. Joseph Whelan. The scope of these inspections was limited to the areas previously described.

The site visits to Waimanalo Gulch MSWLF and Ash Monofill facility were conducted in accordance with Hawaii Revised Statutes (HRS), Section 342H-6. The inspections were unannounced. The inspections were limited to the areas described in the following paragraphs. The inspections did not include an overall compliance inspection of the facility.

MSW Cell E-4, Active Workface Area
On May 9, 2008, SWS inspectors observed numerous stockpiles of gravel material to be utilized for the operation layer within MSW Cell E-4. The stockpiles were adjacent to the active workface area (see photograph 2).

MSW Cell 11
On May 9, 16, and 28, 2008, the inspectors noted large stockpiles of mixed boulders, rocks and fine-grained material on the top deck of MSW Cell 11 (see photographs 4, 6, 7, and 8). The stockpiles were of excavated material that was quarried during the construction of MSW Cell E-4, and were gradually created on top of MSW Cell 11 during the past year. **Special Condition - Section D, Item 10** limits the temporary storage of stockpiled material within the landfill to cover material, gravel for roads/wet weather, liner, etc.

The SWS did not receive a written request and did not approve the storage of the excavated material on top of MSW Cell 11 in violation of **Special Condition - Section D, Item 11**.

Based on our interviews with WMH staff, the material has been stored in excess of thirty (30) days and the schedule for removal was not provided. SWS staff did not observe any temporary berms or other measures to control stormwater flow in the vicinity of the storage piles. Approximately 50% of the storage piles included a significant quantity of fines and smaller graded material, which may direct surface water runoff from the piles. Approximately 50% of the storage piles included larger pieces of gravel and boulders, which would not shed water and may collect rainwater within the

stockpile. The area directly surrounding the stockpiles appeared to be at similar grades as the remainder of the cells. It was not visibly evident that stockpiles were stored on at least 24 inches of intermediate cover.

In addition, the most recent topographic map, dated May 9, 2008, submitted to SWS as part of the Annual Operating Report, shows the stockpile of mixed boulders, rocks, and fine-grained material located at MSW Cell 11 at a height of 469.5 feet above mean sea level. The permitted final grades for the same area, where the stockpile is located, is at an elevation of 430 to 440 feet above sea level.

If permission to stockpile this material was given, **Special Condition - Section D, Items 10.a, d and e**, limits the material storage to 30 days capacity, unless temporary berms or other types of measures to prevent erosion of the stored material are used; requires pot hole samples to verify the depth of intermediate cover; and limits storage stockpiles to 30 days capacity and under permitted grades, unless a professional engineer certifies that the condition will not affect the condition of the landfill.

On May 9, 16, and 28, 2008, the inspectors noted a screener (Read Screen-All, model CV-90-D) on the top deck of MSW Cell 10, and according to Justin Lottig, EPM for WMH, Goodfellow Brothers Inc. (Goodfellow), is currently processing the soil-rock / boulder stockpiles and utilizing the screened gravel material for the operation layer (see photograph 5). According to WMH, Goodfellow plans to process all of the material on site and use it at the facility for various projects within the landfill. The SWS did not receive a written request for this operation, as required by **Special Conditions - Section D, Item 11**.

On May 16, and May 28, 2008, the inspectors out-briefed WMH on findings and potential violations for the site on observations and permit conditions related to the storage/processing and non-notification issues.

Ash Monofill Area
On May 16, 2008, the inspectors noted approximately 10 cubic yards of asphalt mixed with soil and concrete slabs on the top deck of ash monofill Cell 3 (see photograph 3). According to Justin Lottig, the material is to be used as wet weather material. On May 28, 2008, Mr. Whelan also stated that the material was to be used for wet weather material for the ash monofill area. The inspectors explained to Mr. Whelan that storing of asphalt material and concrete slabs mixed with soil on the top deck of the ash monofill is in violation of **Special Condition - Section D, Item 10**, which states: Stockpiled material within the landfill waste boundary shall be limited to cover material on the ash monofill. In addition, the SWS did not receive a written request for this operation, as required by **Special Condition - Section D, Item 11.**

On May 16, and May 28, 2008, the inspectors out briefed WMH on findings and potential violations related to the storage of asphalt and concrete slab and non-notification in violation of **Special Condition - Section D, Item 10.**

Ash monofill, MSW 4B, and E-1 sump Leachate Monitoring Systems
On May 9, 2008, while driving to the workface area, SWS inspectors observed Pacific-Electro Mechanical, Inc., removing the 3-inch diameter galvanized riser pipe with the attached blackhawk pump from MSW Cell 4-B leachate sump to get access to the blackhawk pump. According to Justin Lottig, the riser pipe and pump was being removed to troubleshoot the motor and pump due to high motor resistance and fines

showing up in leachate. The leachate pump has not been working on automatic mode and the pump is being operated manually to remove leachate for the past few weeks. Pacific Electro has been taking manual leachate levels readings once a month and on April 28, 2008, the depth to leachate for 4-B sump was recorded at 122 feet, 8 inches (equivalent to a depth of 19 inches of leachate in the sump).

On May 16, 2008, the E-1 sump transducer reading showed 23.1 inches of leachate and the bubbler reading showed 12 inches of leachate. Because both the bubbler and transducer readings are inconsistent with each other, both readings are suspect. On May 28, 2008, the 4-B sump transducer reading showed 3.4 inches of leachate and the bubbler showed 16 inches of leachate, again inconsistent readings. The ash sump transducer reading showed 50 inches of leachate and the bubbler showed 15 inches of leachate. The measurements for all three systems are inconsistent among the transducer, bubbler, and at times with manual measurements. SWS understands that Pacific Electro is continuously adjusting and re-calibrating the bubbler and transducer systems for all of the sumps, and all measurement systems needs to be consistent.

Leachate Elevation Control Point
On May 28, 2008, Joseph Whelan measured the leachate level in the ash sump in the presence of DOH inspectors. The inspectors noted that there was no elevation control point identified at the top of the casing or within the vicinity of the sump. **Special Condition - Section I., Item 4** requires that an elevation control point be maintained at the top of the casing or other monument in the vicinity of the sump. No such control point was observed at the ash sump and all leachate sumps must have an elevation control point with a monument in the vicinity of the sump.

The 4-B sump was observed with an elevation control point, which is written with permanent marker on the pipe. The E-cell sump was not inspected to determine if a benchmark elevation was available or a monument was placed somewhere within the area.

Perimeter Gas Exceedance
On May 30, 2008, SWS received a call from WMH that during a routine monthly methane gas probe check; WMH personnel detected methane gas in two probes, GP-7 and GP-8 at concentrations of 1.7% and 16.2 %, respectively. WMH believes that the exceedance of methane occurred due to damage and ineffective gas collection wells within the landfill, which lead to the replacement and installation of three additional gas wells. On June 4, 2008, SWS received written notification of methane exceedance in perimeter gas probe (GP) 8 for the May 30, 2008 monitoring. On June 24, 2008, SWS requested from Mr. Lottig, weekly updates of perimeter methane gas data. On June 30, 2008, the SWS received an email from Mr. Jesse Frey, containing perimeter gas monitoring data. According to the data, methane was detected at 17.6% in GP07 and GPP8 on April 25, 2008 at 5:17:00 pm; at 14.8% in GP08 on April 25, 2008 at 5:13:00 pm; and at 14.8% in GPP8 on April 28, 2008 at 5:14:00 pm. These concentrations exceed the lower explosive limit for methane (5%). The SWS did not receive written notification for the April 25, 2008 sampling event on the exceedances, in violation of **Special Conditions, Section H, Item 7.**

Records review

The following records were requested and provided by the facility:
-Leachate Sump Levels Logs for April and May 2008

-Perimeter gas probe readings for April 25 to June 25, 2008

Potential Violations:

1. **Special Condition - Section D, Item 10,** unauthorized storage of excavated material on top deck of MSW Cell 10 & 11 and unauthorized storage of asphalt and concrete slab mixed with soil material on top deck of ash monofill Cell-3.
2. **Special Condition - Section D, Item 11**, Failure to submit a written request for the storage of excavated material on top deck of MSW Cell 10 & 11 and the storage of asphalt and concrete slabs mixed with soil on top deck of ash monofill Cell-3.
3. **Special Condition - Section D, Item 11,** Failure to submit a written request for other activities (operation of a screener) on the MSW landfill and for commencing operations without prior written approval from the department.
4. **Special Condition - Section I, Item 4**, failure to maintain an elevation control point within the immediate vicinities of the leachate sumps.
5. **Special Condition Section H. Perimeter Gas Management, Item 7**, failure to submit written notification of the exceedance and verification of monitoring results to the department within seven days of the April 25, 2008 sampling.

Area of Concern:

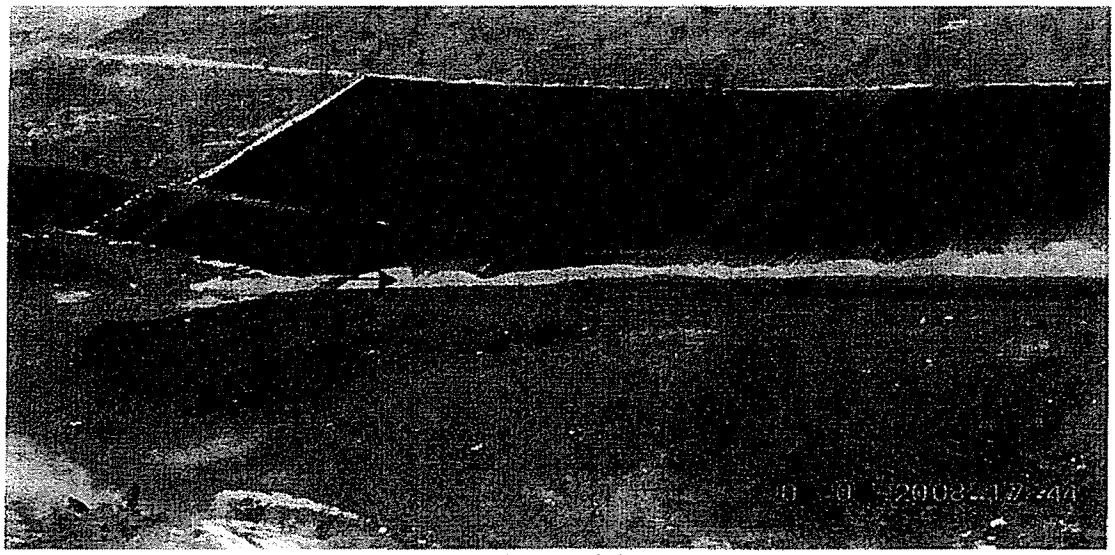
1. WMH is taking manual measurements of leachate once per month even when the automated system is inoperable. We believe that this frequency is inadequate. **Special Condition – Section I, item 9.c**, states that if manual measurements are inconsistent with automated readings or other problems are identified with the system, the department may increase the frequency of manual measurements. As such, you are directed to take manual measurements at least once per week, however, measurements shall be taken every day if the compliance level has been exceeded.

VIOLATIONS:

(X) HAWAII REVISED STATUTES
(X) HAWAII ADMINISTRATIVE RULES TITLE 11 CHAPTER 58.1
( ) COMPLIANCE SCHEDULE
(X) PERMIT CONDITION
( ) VARIANCE CONDITION
( ) OTHER
( ) NONE

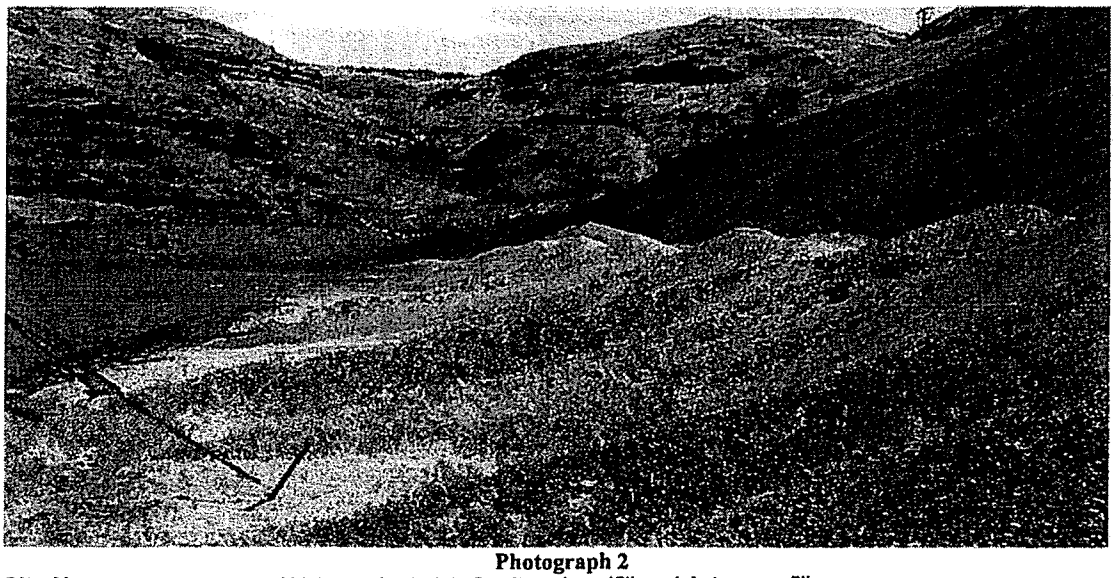
FOLLOW-UP NEEDED: YES (x) WHEN:
WHY:
NO ( )

LIST OF ATTACHMENTS: Photos



Photograph 1

Site Name:	Waimanalo Gulch Sanitary Landfill and Ash monofill
Location:	92-460 Farrington Highway, Kapolei
Date Taken:	May 5, 2008
Photographer:	Provided by WGLF
Description:	MSW Cell E-4 end of day photograph showing stockpiles of operation layer material (red arrow).

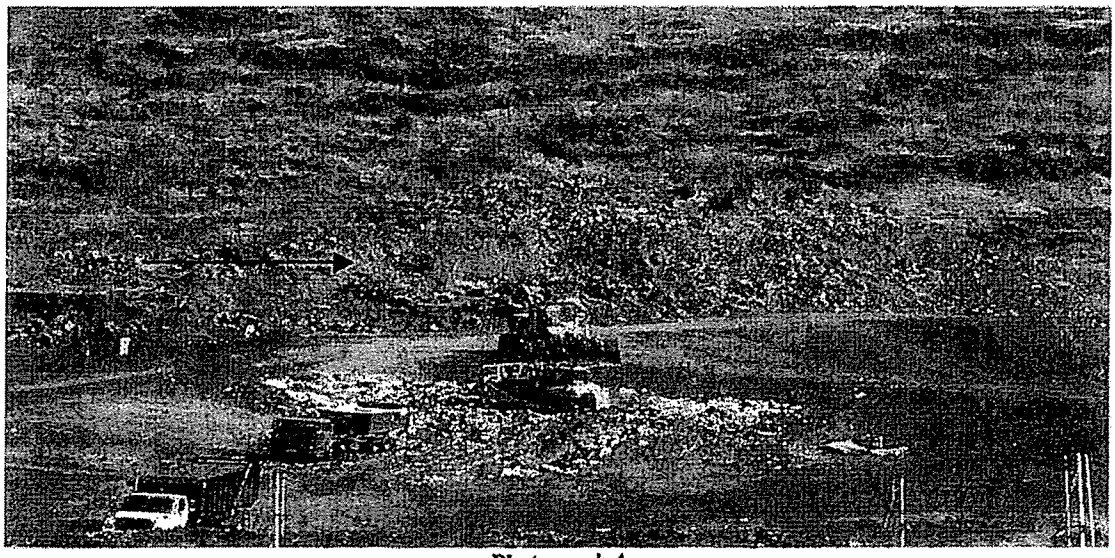


Photograph 2

Site Name:	Waimanalo Gulch Sanitary Landfill and Ash monofill
Location:	92-460 Farrington Highway, Kapolei
Date Taken:	May 9, 2008
Photographer:	JRuiz
Description:	Stockpiles of gravel material for the operation layer within MSW Cell E-4.

Photograph 3

Site Name:	Waimanalo Gulch Sanitary Landfill and Ash monofill
Location:	92-460 Farrington Highway, Kapolei
Date Taken:	May 16, 2008
Photographer:	JRuiz
Description:	Stockpiles of asphalt and concrete material mixed with soil and stored on top of ash monofill cell 3.



Photograph 4

Site Name:	Waimanalo Gulch Sanitary Landfill and Ash monofill
Location:	92-460 Farrington Highway, Kapolei
Date Taken:	May 16, 2008
Photographer:	JRuiz
Description:	The black arrow shows a large pile of excavated material that came from MSW Cell E-4 construction and stored on top of MSW Cell 11. The foreground area is the active workface area for MSW Cell E-4 with a dozer and compactor working the daily MSW waste.

Photograph 5

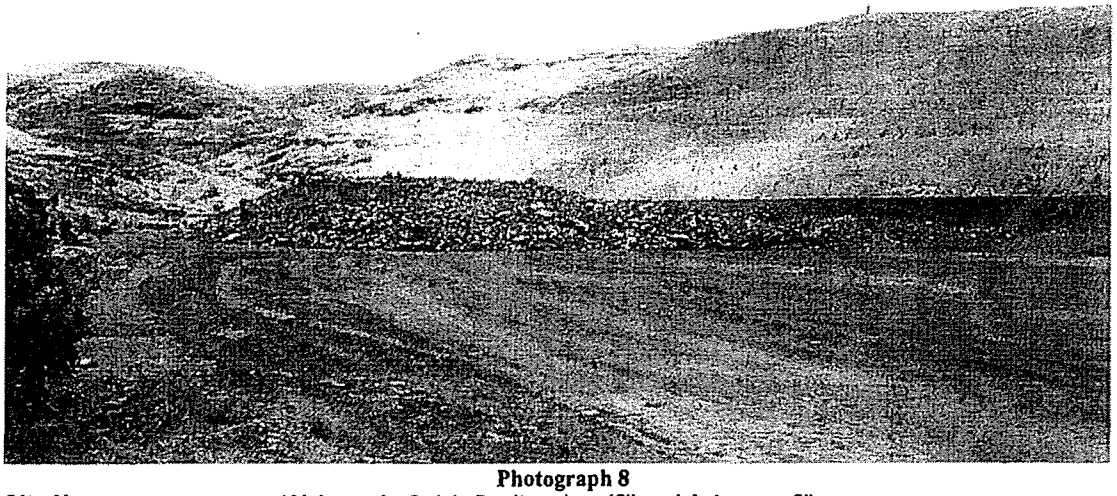
Site Name:	Waimanalo Gulch Sanitary Landfill and Ash monofill
Location:	92-460 Farrington Highway, Kapolei
Date Taken:	May 16, 2008
Photographer:	JRuiz
Description:	Screen-All, Model CV-90-D being utilized to screen material from the stockpile located on MSW Cell 10 &11 for the operation layer in Cell E-4.

Photograph 6

Site Name:	Waimanalo Gulch Sanitary Landfill and Ash monofill
Location:	92-460 Farrington Highway, Kapolei
Date Taken:	May 16, 2008
Photographer:	JRuiz
Description:	View of a large stockpile of sorted rocks and boulders stored on MSW Cell 11.

Photograph 7

Site Name:	Waimanalo Gulch Sanitary Landfill and Ash monofill
Location:	92-460 Farrington Highway, Kapolei
Date Taken:	May 16, 2008
Photographer:	JRuiz
Description:	Another view of the excavated stockpile material from MSW Cell E-4. Note vegetative growth on the stockpile.



Photograph 8

Site Name:	Waimanalo Gulch Sanitary Landfill and Ash monofill
Location:	92-460 Farrington Highway, Kapolei
Date Taken:	May 28, 2008
Photographer:	JRuiz
Description:	View of the excavated stockpile material removed from MSW Cell E-4, looking from the south of MSW Cell 10.