CHECKLIST

Type of Permit: X Well Construction _Pump Installation _Water Use Required

Well Name Wailuku PW Monitor No. 5725-01, 02, 03 Island Maui
Applicant Maui PW/Solid Waste Div. Landowner same
Consultant Masa Fujitaka & Assoc. TMK 3-8-3:19

Appl Recd 02 Jun 95 +90 days 31 Aug. 95 (Ch sign after review; tent. act by)
Mapped/# 15 Jun 95 Logcomp 16 Jun 95 Logbk 16 Jun 95
Acknowgmt Ch 343 pau NA
Fee Depos N/A Tent CWRM Action Ch action: 10 July 95

Copies Sent for Review Sent Comments Recd
DoH/Drink Water JUN 23 1995
Wastewater JUN 23 1995
Hist. Preserv JUN 23 1995
Aquat Res JUN 23 1995
OHA JUN 23 1995
DHHL JUN 23 1995
Honolulu BWS JUN 23 1995
Maui DoW JUN 23 1995
Kauai DoW
Hawaii DoW PW
SCLDF
Com:

Bulletin 15 Jun for July 95

to Agenda Submittal to Appl CWRM _Appr _Deny Permit/Notice to Appl

MW 1 - 305 w 315 d
2 215 225
3 240 250

W 157829
WAILUKU – LANDFILL MONITOR WELLS
(5125–01, 02, 03 M)
TO: Ron Boyle, Jen Goethals
FROM: Charley Ie

Date: 30 March 01

Transmitting permits for MW 6-6, Central Maui Landfill Monitor Wells.
They are also faxed separately to Andy Hirose, MauiDPW.

Jen
ct 228 1990

Ron Boyle Ech
523 8874
F: 523 8850
TO: Jenn Goethals  
FROM: Charles Ice

Date: 07 Mar 01

Transmitting Well Construction Permit & Pump Installation Permit for Wailuku Landfill Monitor Wells (Well Nos. 5125-01 to 03)

Please let us know if you need additional information.

Return Fax: 587-0219
Return Post: P.O.Box 621, Honolulu 96809
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**PLEASE:**

- See Me
- Review & Comment
- Take Action
- Type Draft
- Type Final
- File
- Xerox ____ copies
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<td>YODA, K.</td>
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[Handwritten note: in well files]
Ms. Rae M. Loui, Deputy Director
State of Hawaii, Department of Land and Natural Resources
Commission on Water Resources Management
P.O. Box 621
Honolulu, HI 96809

Dear Ms. Loui:

Subject: Draft Environmental Impact Statement
Expansion of Central Maui Sanitary Landfill Project
Wailuku, Maui, Hawaii; TMK: (2) 3-8-03:4

April 1, 1996

Thank you for your letter, dated February 21, 1996, commenting on the subject project. We have prepared this reply on behalf of the County of Maui, Department of Public Works and Waste Management, Solid Waste Division. Our response to your comments follows:

1. A permit for operation of the facility must be issued by the State in accordance with Hawaii Revised Statutes, Chapter 342H, and the integrated solid waste management plan for the State of Hawaii. Prevention and mitigation of possible ground and surface water contamination is incorporated into the design of the landfill expansion and will be addressed in the permit. A permit application for the operation of Phase IV of the Central Maui Sanitary Landfill Expansion will be filed with the Department of Health (DOH), Environmental Management Division, Office of Solid Waste Management. Applications for operation of landfill Phases V and VI will be filed after the land has been purchased by the County and the facilities have been designed (see Section 4.4.2 of the draft EIS).

The project will accept and must comply with any requirements related to water quality included in the DOH permit.

2. Three monitoring wells are currently in place for the existing landfill. In accordance with the current DOH policy, these wells are sampled quarterly for several ground water properties, including water levels, chlorides, and temperature. Well construction permits were obtained from your office for these existing wells. Permits will be obtained before construction begins on any additional monitoring wells.
Ms. Rae M. Loui
April 1, 1996
Page 2

Thank you for your comments.

Very truly yours,

MASA FUJIOKA AND ASSOCIATES
A Professional Partnership

[Signature]

Jennifer J. Kleveno
Principal

94128-001
PUMP INSTALLATION PERMITS

for
Wailuku Landfill Monitor Wells 1-3
Well Nos. 5125-01 to 03

To: County of Maui
Department of Public Works
200 South High Street
Wailuku, Hawaii 96793

In accordance with Department of Land and Natural Resources Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", your application to install pumps in Wailuku Landfill Monitor Wells 1-3 (Well Nos. 5125-01 to 03) at Wailuku, Maui, TMK 3-8-3:19, is approved, subject to the following conditions:

STANDARD PUMP INSTALLATION PERMIT CONDITIONS

1. The Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, before any work covered by this permit commences.

2. The pump installation permit shall be for installation of a 6 gpm capacity, or less, pump in each well.

3. The permittee shall provide and maintain an approved meter or other appropriate means for measuring and reporting withdrawals and water levels, and appropriate devices or means for measuring chlorides and temperature. These data shall be measured and report to the Commission on a monthly basis, on forms provided by the Commission (attached).

4. The proposed use shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to pump water from a well shall not constitute a determination of correlative water rights. The permittee is notified and by this provision understands that the quantity of water taken from the well could be reduced by the Commission in the future. This permit is not a commitment that the pump capacity permitted here or even some lesser amount is guaranteed in the future.

5. The pump installation portion of the Well Completion Report and as-built sectional drawings of the pump installation shall be submitted to the Commission within thirty (30) days after completion of work.

6. The applicant shall comply with all applicable laws, rules, and ordinances.

7. The pump installation permit application and staff submittal approved by the Chairperson are incorporated into the permit by reference.
PUMP INSTALLATION PERMITS  
Well Nos. 5125-01 to 03

8. The permit may be revoked if work is not started within six (6) months after the date of approval or if work is suspended or abandoned for six (6) months, unless otherwise specified. The work proposed in the well construction permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Commission upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Commission no later than three (3) months prior to the date the permit expires. If the commencement or completion date is not met, the Commission may revoke the permit after giving the permittee notice of the proposed action and an opportunity to be heard.

Special Condition

1. A device to measure withdrawals is not required. Water levels, chlorides, and temperature shall be reported to the Commission on a quarterly basis, on forms provided by the Commission (attached).

[Signature]

MICHAEL D. WILSON, Chairperson  
Commission on Water Resource Management

Date of Issuance: DEC - 1 1995  
Date of Approval: DEC - 1 1995

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed.

Applicant's Signature: [Signature]  
Date: 12-5-95
Printed Name: DAVID F. WISSMAR
Firm or Title: CHIEF SOLID WASTE DIV., COUNTY OF MAA

Please sign both copies and return one copy of this permit to the Commission and retain a copy for your record.

Attach.
cc: USGS  
Department of Health  
Safe Drinking Water Branch  
Ground Water Protection Program  
Wastewater Branch
STANDARD PUMP INSTALLATION PERMIT CONDITIONS

1. The Commission shall be notified before work commences.

2. The pump installation permit shall be for installation of a 6 gpm capacity, or less, pump in each well.

3. The permittee shall provide and maintain an approved meter or other appropriate means for measuring and reporting withdrawals and water levels, and appropriate devices or means for measuring chlorides and temperature. These data shall be measured and report to the Commission on a monthly basis, on forms provided by the Commission (attached).

4. The proposed use shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to pump water from a well shall not constitute a determination of correlative water rights. The permittee is notified and by this provision understands that the quantity of water taken from the well could be reduced by the Commission in the future. This permit is not a commitment that the pump capacity permitted here or even some lesser amount is guaranteed in the future.

5. The pump installation portion of the Well Completion Report and as-built sectional drawings of the pump installation shall be submitted to the Commission within thirty (30) days after completion of work.

6. The applicant shall comply with all applicable laws, rules, and ordinances.

7. The pump installation permit application and staff submittal approved by the Chairperson are incorporated into the permit by reference.

8. The permit may be revoked if work is not started within six (6) months after the date of approval or if work is suspended or abandoned for six (6) months, unless otherwise specified. The work proposed in the well construction permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Commission upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Commission no later than three (3) months prior to the date the permit expires. If the commencement or completion date is not met, the Commission may revoke the permit after giving the permittee notice of the proposed action and an opportunity to be heard.

Attachment C
The Chairperson is authorized to approve permits for monitor test holes and observation wells and for the sealing and abandonment of existing wells, through a submittal approved at a regular Commission meeting on February 15, 1989.

RECOMMENDATION:

That the Commission, via the Chairperson's signature, approve the issuance of pump installation permits for Wailuku Landfill Monitor Wells 1-3 (Well Nos. 5125-01,02,03), subject to the standard conditions in Attachment C and the following special condition:

1. Devices to measure withdrawals and water levels are not required. Reporting withdrawals, water levels, chlorides, and temperature to the Commission are not required.

Please sign the attached permits.
AQUIFER (PUMP) TEST PROCEDURES

The pump test procedure for new wells shall consist of a step-drawdown test followed by a long-term continuous aquifer test. Testing the well and aquifer in the prescribed manner should result in the hydrologic information needed to determine: 1) the well's performance with regard to yield and water quality (chloride concentration), and 2) the nearby hydraulic properties of the aquifer.

General Recording Requirements

The records required for analysis and the tolerance in measurement acceptable for the step-drawdown and long-term continuous aquifer test are as follows:

1. Discharge from the well shall not fluctuate beyond ± 10 percent.
2. Depth to water measurements in the pumped well shall be accurate to 0.01 feet.
3. Time shall be accurate within ± 1 percent.
4. Water discharged from the well during the step-drawdown and long-term test shall be carried away from the well to a distance sufficient to preclude circulation of the discharge water downward to the ground-water table.
5. Recording of data should be on a form similar to Table 1. All information shown in Table 1 shall be provided. In addition, data shall be plotted on Graph 1 and provided.

Step-Drawdown Test

The purpose of the step-drawdown test is to establish the efficiency of the well and to provide preliminary information on the yield of the well, both from a quantity and quality standpoint.

1. Measurement of water level in the pumped well shall be made every 12 hours for a period of no less than two days prior to the initiation of the step-drawdown test in order to obtain the pretest trend in water levels.
2. The step-drawdown test will consist of continuously pumping the well for four hours at four different rates.
   a. The change from one pumping rate to the next must be sufficient to induce an observable change in water level in the well from the previous pumpage rate.
   b. If desired, the four different rates should represent the full range of pump capacity (if the yield can sustain this), but this is not necessary.
AQUIFER (PUMP) TEST PROCEDURES

3. Each pumping rate should be continued for one hour, after which the new rate should be instituted as rapidly as possible.

4. Pumping should begin at the lowest rate and conclude with the highest rate.

5. Pumping should be continuous through the entire step-drawdown test.

6. Measurement of chloride concentration and temperature of the discharge water shall be measured at least five times:
   a. at the end of each pumping rate during the step-drawdown test, and
   b. at the very beginning of the test.

7. A sufficient number of water level measurements shall be made in the pumped well following the termination of the step-drawdown test to establish that the water level fully recovers from each test to pretest levels.

Long-Term Continuous Test

The purpose of the long-term continuous test is to determine the hydraulic properties of the aquifer to explore for and identify nearby aquifer boundaries such as streams or dikes, and to observe the trend in chloride concentration of the discharge water.

1. The long-term test should not commence until the water level in the pumped well has fully recovered from the step-drawdown test. Generally, the time required for this recovery will be slightly greater than four hours. The water level in the pumped well should be measured immediately before initiation of the long-term test.

2. The pump rate for the long-term test should be sufficient to create an observable drawdown.

3. The test should be run 24 hours per day for at least seven days. If during the test, the water level remains the same for a period of 24 hours, the test can be terminated.

4. Measurement of chloride concentration and temperature of the discharge water during the long-term test shall be made at the beginning of the test and every six hours thereafter.

5. Depth to water in all wells shall be measured with sufficient frequency that each logarithmic cycle in time on the data plots (Graph 1) contains at least 10 data points spread through the cycle. Thus, depth to water should be made at t=0 (immediately prior to start of the test), and as close as possible at t=1, 1.5, 2, 2.5, 3, 4, 5, 6, 7, and 8 minutes for the first ten minutes and at all succeeding decimal multiples of these numbers to the end of the test (t=10, 15, 20, 25, 30, 40, 50, 60, 70, and 80 minutes for the log cycle 10 to 100 minutes, etc.)

6. A sufficient number of water level measurements shall be made in the pumped well following termination of the long-term continuous test to establish that the water level fully recovers from each test to pretest levels.
Table 1: AQUIFER TEST DATA

<table>
<thead>
<tr>
<th>Date</th>
<th>Hour</th>
<th>t (min)</th>
<th>Depth to water (ft)</th>
<th>s (unadjusted) (ft)</th>
<th>Adjustment as (ft)</th>
<th>Q (gpm)</th>
<th>Cl⁻ or C°</th>
<th>Temp.</th>
<th>Remarks</th>
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**County:** ____________________________  **Observation well no.:** ____________________________

**Location:** ____________________________  **Pumped well no.:** ____________________________

Average Q: __________ gpm  Distance between Observation & Pumped Well __________ ft.
TO

Division of Water Resource Management
P. O. Box 373
Honolulu, HI 96809

WE ARE SENDING YOU the following items:

- Reports
- Prints
- Plans
- Samples
- Specifications
- Copy of letter
- Change order
- Well Completion Report

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THESE ARE TRANSMITTED as checked below:

- For approval
- Approved as submitted
- Resubmit copies for approval
- For your use
- Approved as noted
- Submit copies for distribution
- As requested
- Returned for corrections
- Return corrected prints
- For review and comment
- Prints returned after loan to us

REMARKS

COPY TO County of Maui
Attn: Mr. Dave Wissmar

SIGNED: Jennifer J. Kleveno, Associate
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
Division of Water Resource Management

WELL COMPLETION REPORT

INSTRUCTIONS: Please print or type and submit completed report within 30 days of well completion to the Division of Water Resource Management, P.O. Box 373, Honolulu, Hawaii 96809. An as-built drawing of the well and chemical analysis, if available, should also be submitted. If necessary, phone 548-7843, Hydrology, Geology Section for assistance.

A. STATE WELL NO. 5125-03
B. LOCATION
   Central Maui Landfill
C. WELL OWNER
   County of Maui, Solid Waste Division
D. DRILLING OR PUMP INSTALLATION CONTRACTOR
   David Pico Waterwell Drilling
E. TYPE OF ROG
   Air Hammer
F. DATE OF WELL COMPLETION
   Nov. 9, 1995
G. DATE OF PUMP INSTALLATION
   Sept. 27, 1995
H. TOTAL DEPTH OF WELL BELOW GROUND
   258 ft.
I. HOLE SIZE
   8 inch dia.
J. CASING INSTALLED:
   4.5 in. I.D. x 24 ft.
K. ANNULUS:
   Grouted from 0 ft. to 229 ft. below ground
L. PERMANENT PUMP INSTALLATION:
   Pump type, make, serial No.4 Stainless steel submersible Grundfos Capacity 6 gpm
   Motor type, H.P., voltage, R.P.M. 1/3 HP, 230 V, 3450
   Depth of pump intake setting 253 ft. below ground
   Which elevation is 11.8 ft.

M. PROPOSED USE
   Groundwater monitoring
N. INITIAL WATER LEVEL
   238.48 ft. below ground
O. INITIAL CHLORIDE
   0 ppm
P. PUMPING TESTS:
   Reference point (R.P.) used:

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Q. DRILLER’S LOG:
   See attached logs

R. REMARKS:

Submitted by (Print)  Jennifer J. Kleveno  Title  Mara Pujicka & Associates  Associate

Signature  Jennifer J. Kleveno

FOR OFFICIAL USE
Latitude 20° 51' 43"
Longitude 156° 25' 18"
Well No. 5125-03
BORING/WELL: MW-3

DRILLING DATES: August 7, 1995-August 9, 1995

SAMPLING METHOD: Grab sample of drill cuttings

DRILLING METHOD: Air Hammer

INITIAL WATER LEVEL: 238.48 feet below grade (2.71’ msl)

GROUND ELEVATION: 241.19’ msl

Lithologic Description:

Surface condition: Reddish brown silty clay.

Reddish brown silty clay, dry, hard.

Lessening clay in sample.

Blue-gray basalt.

Gray basalt; (blue rock), aphaneric, dense.

Reddish brown silty clay, hard, dry, with blue-gray basalt fragments (saprolite).

Weathered reddish gray basalt with rubble.

Vesicular basalt, 2% olivine, <1% augite crystals.

Grades from reddish gray to gray.

Gray basalt, 10% olivine.
BORING/WELL: MW-3

DRILLING DATES: August 7, 1995-August 9, 1995

SAMPLING METHOD: Grab sample of drill cuttings

DRILLING METHOD: Air Hammer

INITIAL WATER LEVEL: 238.48 feet below grade (2.71' msl)

GROUND ELEVATION: 241.19' msl

Lithologic Description

- Rock decrease in olivine.
- Soft basalt, vesicular, some cinder, decrease in olivine. Hammers to a soft power.
- Medium hard basalt, less vesicular.
- Olivine crystals to 1-3%.
- Soft basalt, decrease in olivine to <1%, hammers to powder.

WELL SCHEMATIC

- 4.5-inch PVC well casing
- Centralizer
- 8-inch diameter Borehole
- Bentonite Grout
- Centralizer
# Boring/Well: MW-3

**Drilling Dates:** August 7, 1995-August 9, 1995

**Sampling Method:** Grab sample of drill cuttings

**Drilling Method:** Air Hammer

**Initial Water Level:** 238.48 feet below grade (2.71 msl)

**Ground Elevation:** 241.19 msl

## Lithologic Description

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<tr>
<th>Depth (ft)</th>
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<tr>
<td>220-225</td>
<td>Gray basalt, with plagioclase crystals.</td>
</tr>
<tr>
<td>230-235</td>
<td></td>
</tr>
<tr>
<td>240-245</td>
<td>Groundwater</td>
</tr>
<tr>
<td>250-255</td>
<td></td>
</tr>
<tr>
<td>260-265</td>
<td>Total depth drilled 260 feet below grade.</td>
</tr>
</tbody>
</table>

**Well Schematic**

- Bentonite seal (229 feet)
- 4.5-inch PVC schedule 80 well screen 0.020 slots
- 4-inch stainless steel submersible pump
- 2' PVC
- 4.5-inch solid PVC 5-feet long
- Drill cuttings

## Total Depth Drilled

- 260 feet below grade.

---

*MAFA MASA FUJIOKA & ASSOCIATES*

ENVIRONMENTAL · GEOTECHNICAL · HYDROGEOLOGICAL CONSULTANTS

5125-03

*BOURING LOG AND WELL SCHEMATIC*

Maui Central Landfill
Puunene, Maui, Hawaii
INSTRUCTIONS: Please print or type and submit completed report within 30 days of well completion to the Division of Water Resource Management, P.O. Box 573, Honolulu, Hawaii 96809. An as-built drawing of the well and chemical analysis, if available, should also be submitted. If necessary, phone 548-7543, Hydrology, Geology Section for Assistance.

A. STATE WELL NO. 5125-02 WELL NAME No-2
B. LOCATION Central Maui Landfill
C. WELL OWNER County of Maui, Solid Waste Division
D. DRILLING OR PUMP INSTALLATION CONTRACTOR David Pico Waterwell Drilling
E. TYPE OF RIG Air Hammer
F. DATE OF WELL COMPLETION Nov. 9, 1995 DATE OF PUMP INSTALLATION Oct. 4, 1995
G. GROUND ELEVATION (ma) 221.27 ft.
Top of Drilling Platform 238 ft.
Bench mark and method used to determine ground elevation TRNG STA N.
H. TOTAL DEPTH OF WELL BELOW GROUND 238 ft.
I. HOLE SIZE: 8 inch dia. from 0 ft. to 245 ft. below ground
J. CASING INSTALLED: 4-5 in. I.D. x 24 ft. 0 in. well solid section to 213 ft. below ground
K. ANNUAL: Grouted from 209.8 ft. to 233 ft. below ground
L. PERMANENT PUMP INSTALLATION:
   Pump type, make, serial No. 4" Stainless steel submersible Grundfos Capacity 6 gpm
   Motor type, H.P., voltage, P.S.I. 10 HP Franklin Motor, 2743 RPM
   Depth of pump intake setting 233 ft. below ground
   Depth of bottom of airglue 209.8 ft. below ground
M. PROPOSED USE Groundwater monitoring
N. INITIAL WATER LEVEL 216.57 ft. below ground.
   Date and time of measurement 9/25/95 9:45 am
O. INITIAL CHLORIDE ppm Date and time of sampling
P. PUMPING TESTS: Reference point (R.P.) used: which elevation is ft.
Q. DRILLER'S LOG: See attached logs
   Depth, ft. Rock Description & Remarks Water Level
   0 to 15 reddish brown
   15 to 28 silty clay
   28 to 60 rock & gravel
   60 to 245 basalt
   245 ft. below ground
   Remarks

REMARKS:

FOR DRILLER'S USE.
Submitted by (print) Jennifer J. Kleveno
Job Name
Job No.

Title Masa Fujioka & Associates
Associate

Signature Jennifer J. Kleveno
Date 12-1-95

FOR OFFICIAL USE
Latitude 20° 51' 51"
Longitude 156° 25' 18"
Well No. 5125-02
BORING/WELL: MW-2

DRILLING DATES: August 10, 1995-August 12, 1995

SAMPLING METHOD: Grab sample of drill cuttings

DRILLING METHOD: Air Hammer

INITIAL WATER LEVEL: 216.57 feet below grade (4.70' msl)

GROUND ELEVATION: 221.27' msl

Lithologic Description

<table>
<thead>
<tr>
<th>Sample Depth (ft)</th>
<th>Lithology Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Surface condition: Reddish brown silty clay and gravel.</td>
</tr>
<tr>
<td>10</td>
<td>Reddish brown silty clay to clayey silt, dry, loose.</td>
</tr>
<tr>
<td>15</td>
<td>Blue-gray basalt; lessening clay in sample.</td>
</tr>
<tr>
<td>20</td>
<td>Gray basalt; (blue rock), fine grain, dense.</td>
</tr>
<tr>
<td>30</td>
<td>Reddish brown silty clay, hard, dry, with blue-gray basalt fragments (saprolite).</td>
</tr>
<tr>
<td>40</td>
<td>@ 40' Weathered basalt with rubble.</td>
</tr>
<tr>
<td>50</td>
<td>Highly vesicular basalt, rubble and cinder.</td>
</tr>
<tr>
<td>60</td>
<td>Gray basalt, vesicular, 10% olivine.</td>
</tr>
<tr>
<td>70</td>
<td>Increase in olivine to 20%.</td>
</tr>
<tr>
<td>80</td>
<td>Hammers to sand.</td>
</tr>
<tr>
<td>100</td>
<td>Decrease in olivine to 10%.</td>
</tr>
</tbody>
</table>

BORING LOG
AND WELL SCHEMATIC
BORING/WELL: MW-2

DRILLING DATES: August 10, 1995-August 12, 1995

SAMPLING METHOD: Grab sample of drill cuttings

DRILLING METHOD: Air Hammer

INITIAL WATER LEVEL: 216.57 feet below grade (4.70' msl)

GROUND ELEVATION: 221.27' msl

Lithologic Description

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-110</td>
<td>Rock decrease in olivine.</td>
</tr>
<tr>
<td>110-125</td>
<td>Increase in plagioclase, decrease in olivine to 1%.</td>
</tr>
</tbody>
</table>

WELL SCHEMATIC

- Centralizer
- 4.5-inch PVC well casing
- Bentonite Grout
- 8-inch diameter Borehole

BORING LOG

Masa Fujioka & Associates
Environment, Geotechnical, Hydrogeological Consultants

5125-02

Maui Central Landfill
Puunene, Maui, Hawaii
BORING/WELL: MW-2

DRILLING DATES: August 10, 1995-August 12, 1995

SAMPLING METHOD: Grab sample of drill cuttings

DRILLING METHOD: Air Hammer

INITIAL WATER LEVEL: 216.57 feet below grade (4.70' msl)

GROUND ELEVATION: 221.27' msl

WELL SCHEMATIC

Lithologic Description

- Gray basalt, as above.

- Groundwater

Total depth drilled 245 feet below grade.
INSTRUCTIONS: Please print or type and submit completed report within 30 days of well completion to the Division of Water Resource Management, P.O. Box 373, Honolulu, Hawaii 96813. An as-built drawing of the well and chemical analysis, if available, should also be submitted. If necessary, phone 548-2543, Hydrology, Geology Section for Assistance.

<table>
<thead>
<tr>
<th>A. STATE WELL NO.</th>
<th>5125-01</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELL NAME</td>
<td>MP-1</td>
</tr>
<tr>
<td>ISLAND</td>
<td>Maui</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. LOCATION</th>
<th>Central Maui Landfill</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAX MAP KEY</td>
<td>3-8-03-12</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C. WELL OWNER</th>
<th>County of Maui, Solid Waste Division</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>D. DRILLING OR PUMP INSTALLATION CONTRACTOR</th>
<th>David Pico Waterwell Drilling</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>E. TYPE OF RIG</th>
<th>Air Hammer</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRILLER</td>
<td>David Pico</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>F. DATE OF WELL COMPLETION</th>
<th>Nov. 9, 1995</th>
</tr>
</thead>
<tbody>
<tr>
<td>DATE OF PUMP INSTALLATION</td>
<td>Sept. 29, 1995</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>G. GROUND ELEVATION (m)</th>
<th>30.20 ft.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>H. TOTAL DEPTH OF WELL BELOW GROUND</th>
<th>318 ft.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>I. HOLE SIZE</th>
<th>8 inch dia. from 0 ft. to 325 ft. below ground</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8 inch dia. from 0 ft. to 3 ft. below ground</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>J. CASING INSTALLED:</th>
<th>4.5 in. I.D. x Sch. 80 ft. well solid section to 293 ft. below ground</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4.5 in. I.D. x Sch. 80 ft. well perforated section to 313 ft. below ground</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>K. ANNULUS:</th>
<th>Grouted from 0 ft. to 284 ft. below ground</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gravel packed from 284 ft. to 318 ft. below ground</td>
</tr>
</tbody>
</table>

| L. PERMANENT PUMP INSTALLATION: | Pump type, make, serial No. 4" Stainless steel submersible Grond  |
|                                 | Capacity 6 gpm |
|                                 | Motor type: R.P., voltage, r.p.m. 103 W Franklin Motor, 3/4 HP, 230V |
|                                 | Depth of pump intake setting 313 ft. below ground |
|                                 | Depth of bottom of casing: 313 ft. below ground |

<table>
<thead>
<tr>
<th>M. PROPOSED USE</th>
<th>Groundwater monitoring</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>N. INITIAL WATER LEVEL</th>
<th>296.37 ft. below ground</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date and time of measurement</td>
<td>9/29/95 / 8:15 am</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>O. INITIAL CHLORIDE</th>
<th>ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date and time of sampling</td>
<td>8:15 am</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>P. PUMPING TESTS: Reference point (R.P.) used:</th>
<th>which elevation is:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td></td>
</tr>
<tr>
<td>Elapsed Time (hours)</td>
<td>Rate (gpm) Draw-</td>
</tr>
<tr>
<td></td>
<td>(ppm) down (ft.)</td>
</tr>
<tr>
<td></td>
<td>Temp. °F</td>
</tr>
<tr>
<td>to</td>
<td>to</td>
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<td>to</td>
<td>to</td>
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<td>to</td>
<td>to</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Q. DRILLER'S LOG: See attached logs</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Water Level</th>
<th>Rock Description &amp; Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>ft.</td>
<td></td>
</tr>
<tr>
<td>0 to 15</td>
<td>red silty clay</td>
</tr>
<tr>
<td>15 to 40</td>
<td>blue rock - basalt</td>
</tr>
<tr>
<td>40 to 50</td>
<td>reddish brown silty clay</td>
</tr>
<tr>
<td>50 to 52</td>
<td>gray basalt - fractured</td>
</tr>
<tr>
<td>52 to 55</td>
<td>blue-gray basalt</td>
</tr>
<tr>
<td>55 to 108</td>
<td>red silty clay</td>
</tr>
<tr>
<td>108 to 325</td>
<td>gray basalt</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Water Level</th>
<th>Rock Description &amp; Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>ft.</td>
<td></td>
</tr>
<tr>
<td>0 to 15</td>
<td></td>
</tr>
<tr>
<td>15 to 40</td>
<td></td>
</tr>
<tr>
<td>40 to 50</td>
<td></td>
</tr>
<tr>
<td>50 to 52</td>
<td></td>
</tr>
<tr>
<td>52 to 55</td>
<td></td>
</tr>
<tr>
<td>55 to 108</td>
<td></td>
</tr>
<tr>
<td>108 to 325</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q. DRILLER'S LOG: See attached logs</th>
</tr>
</thead>
</table>

REMARKS:

Submitted by (print) Jennifer J. Kleveno
Title: Associate
Signature: Jennifer J. Kleveno

FOR DRILLER'S USE

Job Name:
Job No.:

FOR OFFICIAL USE

Latitude: 20° 51' 32"
Longitude: 156° 25' 05"
Well No.: 5125-01
**BORING/WELL: MW-1**

**DRILLING DATES:** August 1, 1995-August 5, 1995

**SAMPLING METHOD:** Grab sample of drill cuttings

**DRILLING METHOD:** Air Hammer

**INITIAL WATER LEVEL:** 296.37 feet below grade (4.83' msl)

**GROUND ELEVATION:** 301.20' msl

**Lithologic Description**

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>USCS Classification</th>
<th>Lithologic Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>CL</td>
<td>Surface condition: Red clay and gravel. Red silt clay dry, stiff.</td>
</tr>
<tr>
<td>10</td>
<td>CL/ Rock</td>
<td>Lessening clay in sample; Blue-gray basalt.</td>
</tr>
<tr>
<td>15</td>
<td>Rock</td>
<td>Gray basalt; (blue rock), aphanitic. &lt;1% plagioclase crystals.</td>
</tr>
<tr>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>CL</td>
<td>Reddish brown silt clay, hard, dry, with blue-gray basalt fragments (saprolite).</td>
</tr>
<tr>
<td>30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>Rock/Rock/Cinder</td>
<td>@ 49' Gray basalt with clinker (highly vesicular/fragmented rock).</td>
</tr>
<tr>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>45</td>
<td>Rock</td>
<td>Blue-gray basalt, dense</td>
</tr>
<tr>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>55</td>
<td>CL</td>
<td>Red silt clay, hard, dry.</td>
</tr>
<tr>
<td>60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>95</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**WELL SCHEMATIC**

- 8-inch diameter borehole
- 8-inch diameter PVC Schedule 80 well casing
- 4.5-inch diameter PVC Schedule 80 riser pipe
- Centralizer

**BORING LOG AND WELL SCHEMATIC**

Maui Central Landfill
Puunene, Maui, Hawaii
BORING/WELL: MW-1

DRILLING DATES: August 1, 1995-August 5, 1995
SAMPLING METHOD: Grab sample of drill cuttings
DRILLING METHOD: Air Hammer
INITIAL WATER LEVEL: 296.37 feet below grade (4.83' msl)
GROUND ELEVATION: 301.20' msl

Lithologic Description

- 100 ft: Red silty clay, hard, dry.
- 110 ft: Rock Blue-gray basalt, hard, dense.
- 120 ft: Dark basalt, cuttings are powder.
- 150 ft: Gray basalt, hard, 2% olivine crystals.
- 190 ft: Reduction in olivine crystals.

WELL SCHEMATIC

- 4.5-inch diameter PVC Schedule 80 well casing
- 8-inch diameter borehole
- Cement Grout
- Centralizer
- Bentonite Grout

BORING LOG
AND WELL SCHEMATIC
BORING/WELL: MW-1

DRILLING DATES: August 1, 1995-August 5, 1995

SAMPLING METHOD: Grab sample of drill cuttings

DRILLING METHOD: Air Hammer

INITIAL WATER LEVEL: 296.37 feet below grade (4.83' msl)

GROUND ELEVATION: 301.20' msl

Lithologic Description

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Lithology</th>
</tr>
</thead>
<tbody>
<tr>
<td>200-205</td>
<td>Rock, Gray basalt, as above.</td>
</tr>
<tr>
<td>210-220</td>
<td>Gray fine powder-like basalt cuttings; no chips.</td>
</tr>
</tbody>
</table>

WELL SCHEMATIC

- 4.5-inch PVC well casing
- Centralizer
- Bentonite Grout
- 8-inch diameter Borehole
- Bentonite seal (281 feet)
- 4.5-inch PVC schedule 80 well screen 0.020 slots
- Groundwater

BORING LOG
AND WELL SCHEMATIC

Maui Central Landfill MW-1
Puunene, Maui, Hawaii
BORING/WELL: MW-1

DRILLING DATES: August 1, 1994-August 5, 1994

SAMPLING METHOD: Grab sample of drill cuttings

DRILLING METHOD: Air Hammer

INITIAL WATER LEVEL: 296.37 feet below grade (4.83' msl)

GROUND ELEVATION: 301.20' msl

Lithologic Description

Total depth of boring = 325 feet below ground surface.
Mr. Charles Jencks, Director
County of Maui
Department of Public Works
200 South High Street
Wailuku, Hawaii 96793

Dear Mr. Jencks:

Pump Installation Permits
Wailuku Landfill Monitor Wells 1-3
Well Nos. 5125-01 to 03

Enclosed are two copies of your Pump Installation Permits for the captioned monitor wells. Please sign them and return one for our files.

Also enclosed is a Water Use Report form, to be used as a master for your periodic reporting.

If you have any questions, please call Rae M. Loui, Deputy Director, at 587-0214.

Aloha,

MICHAEL D. WILSON

Enclosures
TO: Michael D. Wilson, Chairperson
Commission on Water Resource Management

FROM: Rae M. Loui, Deputy Director
Commission on Water Resource Management

SUBJECT: Approval of Pump Installation Permits
Wailuku Landfill Monitor Wells (Well Nos. 5125-01 to 03)

APPLICANT:
County of Maui
Department of Public Works
200 South High Street
Wailuku, Hawaii 96793

LANDOWNER:
Same

DESCRIPTION:
Location: Wailuku, Maui
Tax Map Key 3-8-3:19 (See Attachment A).

Dimensions:

<table>
<thead>
<tr>
<th></th>
<th>01</th>
<th>02</th>
<th>03</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground elevation:</td>
<td>305 ft.</td>
<td>215 ft.</td>
<td>240 ft.</td>
</tr>
<tr>
<td>Hole diameter:</td>
<td>4.5 in.</td>
<td>4.5 in.</td>
<td>4.5 in.</td>
</tr>
<tr>
<td>Solid casing depth:</td>
<td>295 ft.</td>
<td>205 ft.</td>
<td>230 ft.</td>
</tr>
<tr>
<td>Screen casing depth:</td>
<td>20 ft.</td>
<td>20 ft.</td>
<td>20 ft.</td>
</tr>
<tr>
<td>Open hole:</td>
<td>none</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>Total depth:</td>
<td>315 ft.</td>
<td>225 ft.</td>
<td>250 ft.</td>
</tr>
</tbody>
</table>

ISSUES/ANALYSIS:
Staff Review: Well Construction Permits for these wells were approved August 3, 1995. At that time, it was not known that pumps would be required for monitoring. The small amounts to be withdrawn are considered to have negligible effect.

The wells extend 10 ft. below sea level, to basal freshwater. Maximum withdrawals are about 60 gallons on a quarterly basis, for groundwater quality monitoring to meet State and Federal requirements. No adverse impacts are expected.
Because these pumps will be for water quality monitoring sampling, standard condition 3 is not appropriate. Withdrawals and water level effects will be negligible. While contaminant parameters being measured will be reported to the Department of Health, and would be available to the Commission, we believe that standard reporting of water levels, chlorides, and temperature readings should be made to the Commission.

The Chairperson is authorized to approve permits for monitor test holes and observation wells and for the sealing and abandonment of existing wells, through a submittal approved at a regular Commission meeting on February 15, 1989.

RECOMMENDATION:

That the Commission, via the Chairperson's signature, approve the issuance of pump installation permits for Wailuku Landfill Monitor Wells 1-3 (Well Nos. 5125-01 to 03), subject to the standard pump installation permit conditions in Attachment C and the following special condition:

1. A device to measure withdrawals is not required. Water levels, chlorides, and temperature shall be reported to the Commission on a quarterly basis, on forms provided by the Commission (Attachment D).

Please sign the attached permits and transmittal letter.
Mr. Charles Jencks, Director  
County of Maui  
Department of Public Works  
200 South High Street  
Wailuku, Hawaii 96793

Dear Mr. Jencks:

Pump Installation Permits  
Wailuku Landfill Monitor Wells 1-3  
Well Nos. 5125-01 to 03

Enclosed are two copies of your Pump Installation Permits for the captioned monitor wells. Please sign them and return one for our files.

Also enclosed is a Water Use Report form, to be used as a master for your periodic reporting.

If you have any questions, please call Rae M. Loui, Deputy Director, at 587-0214.

Aloha,

MICHAEL D. WILSON

Enclosures
To: County of Maui
Department of Public Works
200 South High Street
Wailuku, Hawaii 96793

In accordance with Department of Land and Natural Resources Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", your application to install pumps in Wailuku Landfill Monitor Wells 1-3 (Well Nos. 5125-01 to 03) at Wailuku, Maui, TMK 3-8-3:19, is approved, subject to the following conditions:

STANDARD PUMP INSTALLATION PERMIT CONDITIONS

1. The Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, before any work covered by this permit commences.

2. The pump installation permit shall be for installation of a 6 gpm capacity, or less, pump in each well.

3. The permittee shall provide and maintain an approved meter or other appropriate means for measuring and reporting withdrawals and water levels, and appropriate devices or means for measuring chlorides and temperature. These data shall be measured and report to the Commission on a monthly basis, on forms provided by the Commission (attached).

4. The proposed use shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to pump water from a well shall not constitute a determination of correlative water rights. The permittee is notified and by this provision understands that the quantity of water taken from the well could be reduced by the Commission in the future. This permit is not a commitment that the pump capacity permitted here or even some lesser amount is guaranteed in the future.

5. The pump installation portion of the Well Completion Report and as-built sectional drawings of the pump installation shall be submitted to the Commission within thirty (30) days after completion of work.

6. The applicant shall comply with all applicable laws, rules, and ordinances.

7. The pump installation permit application and staff submittal approved by the Chairperson are incorporated into the permit by reference.
8. The permit may be revoked if work is not started within six (6) months after the date of approval or if work is suspended or abandoned for six (6) months, unless otherwise specified. The work proposed in the well construction permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Commission upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Commission no later than three (3) months prior to the date the permit expires. If the commencement or completion date is not met, the Commission may revoke the permit after giving the permittee notice of the proposed action and an opportunity to be heard.

**Special Condition**

1. A device to measure withdrawals is not required. Water levels, chlorides, and temperature shall be reported to the Commission on a quarterly basis, on forms provided by the Commission (attached).

---

**Applicant's Declaration**

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed.

Applicant's Signature: ___________________________ Date: ____________

Printed Name: ________________________________________

Firm or Title: ________________________________________

Please sign both copies and return one copy of this permit to the Commission and retain a copy for your record.

Attach. cc: USGS
Department of Health
Safe Drinking Water Branch
Ground Water Protection Program
Wastewater Branch
1. APPLICANT: (may be a, b, or c, but all must be filled in)  
(a) WELL OWNER  
   County of Maui, Dept. of Public Works & Waste Management, Solid Waste Division  
   Firm Name: Public Works & Waste Management, Solid Waste Division  
   Contact Person: David Wissmar  
   Ph: 243-7843  
   Address: 200 South High Street, Wailuku, Maui, Hawaii 96793  
(b) LANDOWNER  
   County of Maui, Dept. of Public Works & Waste Management, Solid Waste Division  
   Firm Name: Public Works & Waste Management, Solid Waste Division  
   Contact Person: David Wissmar  
   Ph: 243-7843  
   Address: 200 South High Street, Wailuku, Maui, Hawaii 96793  
(c) CONTRACTOR  
   David Pico  
   Waterwell Drilling  
   Ph: 877-3419  
   Address: 343 Alu Road, Wailuku, Maui, Hawaii 96793  
   Contractor's C-87 License No: ABC 2291  

2. WELL LOCATION/NAME: Southeast section of Phase I/M-1  
   Island: Maui  
   Address: Central Maui Landfill, Pulehu Road, South High Street, Wailuku, Maui, Hawaii 96793  
   Tax Map Key: (2) 23-8-03:19  
   (Attach a USGS map, scale 1" = 2000 ft., and a property tax map showing well location referenced to established property boundaries.)

3. (a) PROPOSED WORK:  
   - Drill New Well  
   - * Alter Location  
   - Modify Existing Well  
   - Redrill  
   - Replace Pump  
   - Deepen  
   - * Abandon/Seal  
   * Be sure to complete and submit well abandonment report upon completion of work.  
(b) WELL TYPE:  
   - Dug  
   - Bored  
   - Driven  
   - Drilled  
   - Radial  
   Is this well a part of a battery of wells?  
   - Yes  
   - No  
   (Briefly describe and fill in the diagram on the back of this form.)

4. PROPOSED PUMP INFORMATION:  
   Rated Pump Capacity: ___ Six ___ gallons per minute  
   Pump Type:  
   - Deep Well Turbine  
   - Rotary  
   - Centrifugal  
   Motor:  
   - Diesel  
   - Gas  
   - Electric, rated horsepower of __________  

5. PROPOSED USE:  
   - Municipal (Including hotels, stores, etc.)  
   - Military  
   - Domestic (Individual, noncommercial water use)  
   - Industrial  
   - Irrigation (crop)  
   - Other (explain)  
   - Other (explain)  
   - Urban  
   - Agriculture  
   - Rural  
   - Conservation  
   State Land Use District:  
   County Zoning (describe):  
   (If more space is needed, continue below under remarks, explanations.)

6. (a) PROPOSED AMOUNT OF WITHDRAWAL:  
   - 60 gallons per day  
   - Quarteraly  
(b) METHOD OF FLOW MEASUREMENT:  
   - Flow-meter  
   - Open-pipe  
   - Office Plate  
   - weir  

7. PENDING ACTIONS:  
   - CDUA  
   - SMA  
   - ES  
   - EA  
   - NONE  
   - Other (explain)  
   (If more space is needed, continue on back)

8. REMARKS, EXPLANATIONS:  
   5. Monitoring well  
   7. Regulation requirements for State and Federal quarterly groundwater monitoring. Maximum withdrawal is 60 gallons every 3 months, water will be pumped for sampling only.
Remarks, Explanations (cont'd):

SEE WELL CONSTRUCTION PERMITS FOR DETAILS ON WELL CONSTRUCTION

9. PROPOSED WELL SECTION

- Elevation at top of casing: ________ ft., msl.
- Ground Elevation: ________ ft., msl
- Cement Grout: ________ ft.
- Rock Packing: ________ ft.
- Hole Diameter: ________ in.
- Total Depth: ________ ft.

Solid Casing:
- Material
- Length
- Diameter
- Wall thickness

Casing: □ Perforated □ Screen
- Material
- Length
- Diameter
- Wall thickness
- Openings: ________ sq. in./l.f.

Open Hole:
- Length
- Diameter

*Approximate elevation at time of filing application. Ground elevation above mean sea level (msl) by a surveyor licensed by the State must be submitted at start of construction. Final elevations of well components shall be submitted in the well completion/well abandonment reports.
APPLICATION FOR PERMIT

1. APPLICANT: (may be a, b, or c, but all must be filled in)
   (a) WELL OWNER:
       County of Maui, Dept. of Public Works & Waste
       Firm/Name: Management, Solid Waste Division
       Contact Person: David Wissmar
       Ph.: 243-7843
       Address: 200 South High Street
       Wailuku, Maui, Hawaii 96793
   (b) LANDOWNER:
       County of Maui, Dept. of Public Works & Waste
       Firm/Name: Management, Solid Waste Division
       Contact Person: David Wissmar
       Ph.: 243-7843
       Address: 200 South High Street
       Wailuku, Maui, Hawaii 96793
   (c) CONTRACTOR:
       David Pico
       Firm/Name: Waterwell Drilling
       Ph.: 877-3419
       Contractor’s C-57 License No.: ABC 2291
       Address: 343 Alu Road
       Wailuku, Maui Hawaii 96793

2. WELL LOCATION/NAME: Northwest section of Phase II/MP-3
   Island: Maui
   Address: Central Maui Landfill, Pulehu Road
   Wailuku, Maui Hawaii 96793
   (Attach a USGS map, scale 1"=2000, and a property tax map showing well location referenced to established property boundaries.)

3. (a) PROPOSED WORK:
   [ ] Drill New Well
   [ ] Modify Existing Well
   [ ] Redrill
   [ ] Install New Pump
   [ ] Replace Pump
   [ ] Modify Pump
   [ ] * Alter Location
   [ ] * Abandon/Seal
   
   (b) WELL TYPE:
   [ ] Dug
   [ ] Bored
   [ ] Driven
   [ ] Drilled
   [ ] Radial
   Is this well a part of a battery of wells? [ ] Yes [ ] No
   (Briefly describe and fill in the diagram on the back of this form.)

4. PROPOSED PUMP INFORMATION:
   Rated Pump Capacity: Six gallons per minute
   Motor:
   [ ] Diesel
   [ ] Electric

5. PROPOSED USE:
   [ ] Municipal (Including hotels, stores, etc.)
   [ ] Military
   [ ] Domestic (Individual, noncommercial water use)
   [ ] Other (explain)
   [ ] Irrigation (crop)
   [ ] Other (explain)
   State Land Use District:
   [ ] Urban
   [ ] Agricultural
   [ ] Rural
   [ ] Conservation
   County Zoning (Describe):
   [ ] Other
   [ ] Industrial
   [ ] Other (explain)
   (If more space is needed, continue below under remarks, explanations.)

6. (a) PROPOSED AMOUNT OF WITHDRAWAL:
   60 gallons per day
   (b) METHOD OF FLOW MEASUREMENT:
   [ ] Flow-meter
   [ ] Open-pipe
   [ ] Office Plate
   [ ] Weir

7. PENDING ACTIONS:
   [ ] CDUA
   [ ] SMA
   [ ] EIS
   [ ] EA
   [ ] None
   [ ] Other (explain)

8. REMARKS, EXPLANATIONS:
   Monitoring well 7. Regulation requirements for State and Federal quarterly groundwater monitoring. Maximum withdrawal is 60 gallons every 3 months, water will be pumped for sampling only.
   (If more space is needed, pencill on back)

NOTE: Signing below indicates that the applicant understands that, if the permit requested is granted by the Commission on Water Resource Management, the proposed work is to be completed within two (2) years of the approval date. In addition, the contractor shall submit to the Commission a well completion report, well abandonment report, or both, within 30 days after completion date of the permitted work. The applicant also understands that upon request of the permit application for the withdrawal of water at the state permissive amount of water shall be submitted to the Commission. The applicant further understands that if the withdrawal of the permitted amount of water shall be submitted to the Commission. The applicant further understands that if the withdrawal of water at the state permissive amount of water shall be submitted to the Commission. The applicant further understands that if the withdrawal of water at the state permissive amount of water shall be submitted to the Commission. The applicant further understands that if the withdrawal of water at the state permissive amount of water shall be submitted to the Commission. The applicant further understands that if the withdrawal of water at the state permissive amount of water shall be submitted to the Commission. The applicant further understands that if the withdrawal of water at the state permissive amount of water shall be submitted to the Commission. The applicant further understands that if the withdrawal of water at the state permissive amount of water shall be submitted to the Commission. The applicant further understands that if the withdrawal of water at the state permissive amount of water shall be submitted to the Commission. 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The applicant further understands that if the withdrawal of water at the state permissive amount of water shall be submitted to the Commission. The applicant further understanding...
Remarks, Explanations (cont'd):

SEE WELL CONSTRUCTION GUIDELINES FOR DETAILS
ON WELL CONSTRUCTION

8. PROPOSED WELL SECTON

- Elevation at top of casing: _______________ ft., m.a.s.l.
- Ground Elevation: _______________ ft., m.a.s.l.
- Cement Grout: _______________ ft.
- Rock Packing: _______________ ft.
- Hole Diameter: _______________ in.
- Solid Casing:
  - Material:
  - Length:
  - Diameter:
  - Wall thickness:
- Casing: ☐ Perforated ☐ Screen
  - Material:
  - Length:
  - Diameter:
  - Wall thickness:
  - Openings _______________ sq. in./ft.
- Open Hole:
  - Length:
  - Diameter:

*Approximate elevation at time of filing application. Ground elevation above mean sea level (m.a.s.l) by a surveyor licensed by the State must be submitted at start of construction. Final elevations of well components shall be submitted in the well completion/well abandonment report.
APPLICATION FOR PERMIT

1. APPLICANT: (may be a, b, or c, but all must be filled in)
   (a) WELL OWNER County of Maui, Dept. of Public Works & Waste
      Firm/Name: Management, Solid Waste Division
      Contact Person: David Wissmar Ph: 243-7843
      Address: 200 South High Street, Wailuku, Maui, Hawaii 96793
   (b) LANDOWNER County of Maui, Dept. of Public Works & Waste
      Firm/Name: Management, Solid Waste Division
      Contact Person: David Wissmar Ph: 243-7843
      Address: 200 South High Street, Wailuku, Maui, Hawaii 96793
   (c) CONTRACTOR David Pico
      Firm/Name: Waterwell Drilling Ph: 877-3419
      Address: 342 Alu Road, Wailuku, Maui Hawaii 96793
      Contractor's C-57 License No: ABC 2291

2. WELL LOCATION/NAME: North section of Phase III/MM-2 Island: Maui
   Address: Central Maui Landfill, Pulehu Road
   (Attach a USGS map, scale 1" = 2000', and a property tax map showing well location referenced to established property boundaries)

3. (a) PROPOSED WORK:

   - Drill New Well
   - Modify Existing Well
   - Redrill
   - Install New Pump
   - Replace Pump
   - Modify Pump
   - Be sure to complete and submit well abandonment report upon completion of work.

   (b) WELL TYPE:

   - Dig
   - Bored
   - Driven
   - Drilled
   - Radial
   - Is this well part of a battery of wells? (a) Yes (b) No
   (Briefly describe and fill in the diagram on the back of this form)

4. PROPOSED PUMP INFORMATION:
   Rated Pump Capacity: Six gallons per minute
   Motor:
   - Deep Well Turbine
   - Rotary
   - Submersible
   - Centrifugal
   - Propeller
   - Rotary-Displacement
   - Reciprocating
   - Impulse
   - Electric, rated horsepower of...

5. PROPOSED USE:

   - Municipal (including hotels, stores, etc.)
   - Industrial
   - Military
   - Domestic (individual, noncommercial water use)
   - Irrigation (crop)
   - Other (explain)

   State Land Use District:
   - Urban
   - Agriculture
   - Rural
   - Conservation

   County Zoning (describe)
   - Urban
   - Agriculture
   - Rural
   - Conservation

   (If more space is needed, continue below under remarks, explanations.)

6. (a) PROPOSED AMOUNT OF WITHDRAWAL:
   - 60 gallons per day
   - Quarterly

7. PENDING ACTIONS:
   - CDUA
   - SMA
   - ES
   - EA
   - NONE
   - Other (explain)

8. REMARKS, EXPLANATIONS:

   5. Monitoring well 7. Regulation requirements for State and Federal quarterly groundwater monitoring. Maximum withdrawal is 60 gallons every 3 months, water will be pumped for sampling only.

   (If more space is needed, continue on back)

NOTE: Signing below indicates that the applicant understands that, if the permit is granted, the proposed works is to be completed within two (2) years of the approval date. The contractor shall submit to the Commission a well completion report, well abandonment report, or both, within 30 days after completion date of the permitted well. The contractor also understands that monthly water use data shall be submitted to the Commission. The applicant further understands that approval of the proposed permit shall not constitute a determination of conative water rights and shall not guarantee the permit capacity or future use up to the permitted pump capacity.

Well Owner County of Maui, Dept. of Public Works & Waste
Firm/Name: Management, Solid Waste Division
Contact Person: David Wissmar Ph: 243-7843
Signature: Date: 9-21-95

Landowner County of Maui, Dept. of Public Works & Waste
Firm/Name: Management, Solid Waste Division
Contact Person: David Wissmar Ph: 243-7843
Signature: Date: 9-21-95

Contractor Waterwell Drilling
Firm/Name: Waterwell Drilling Ph: 877-3419
Signature: Date: 9-21-95

For Official Use Only:
Date Received
Date Accepted
Field Checked By
Longitude
Aquifer System Name
State Water No.
Ground Elevation: ______ ft., msl

Cement Grout: ______ ft.

Rock Packing: ______ ft.

Solid Casing:
Material
Length
Diameter
Wall thickness

Casing: [ ] Perforated  [ ] Screen
Material
Length
Diameter
Wall thickness
Openings ________ sq. in./l.f.

Hole Diameter: ______ in.

Total Depth ________ ft.

Open Hole:
Length ________ ft.
Diameter ________ in.

Remarks, Explanations (cont'd):

*Approximate elevation at time of filing application. Ground elevation above mean sea level (msl) by a surveyor licensed by the State must be submitted at start of construction. Final elevations of well components shall be submitted in the well completion/well abandonment reports.
<table>
<thead>
<tr>
<th>FROM:</th>
<th>DATE:</th>
<th>SUSPENSE DATE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>R. LOUI</td>
<td>8/10</td>
<td></td>
</tr>
</tbody>
</table>
State of Hawaii  
Department of Land and Natural Resources  
Commission on Water Resource Management  
P.O. Box 621  
Honolulu, Hawaii 96809

Subject: Wailuku Landfill Monitor Wells  
Well Nos. 5125-01, 02, 03

Masa Fujioka and Associates (MFA) has prepared this letter on behalf of the County of Maui, Department of Public Works and Waste Management. The County has received the well construction permit for the three monitoring wells. This letter serves as written notification to the Commission that we will begin constructing the three monitoring wells this month.

If all goes as scheduled, the wells will be completed in September 1995. We will forward the well completion report, well elevations, as-built sectional drawings of the wells, and a plot plan to the Commission within thirty (30) days after completion of well construction.

Please call me at 484-5366 if you have any questions regarding the well construction.

Yours very truly,

MASA FUJIOKA AND ASSOCIATES  
A Professional Partnership

cc: Dave Wissmar  
County of Maui  
Department of Public Works and Waste Management
To: County of Maui  
Department of Public Works  
and Waste Management  
200 South High Street  
Wailuku, Hawai'i 96793

In accordance with Department of Land and Natural Resources Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", your application to construct Wailuku Landfill Monitor Wells (Well Nos. 5125-01,02,03) at Wailuku, Maui, TMK 3-8-3:19, is approved, subject to the following conditions:

STANDARD WELL CONSTRUCTION PERMIT CONDITIONS

1. The Commission on Water Resource Management, P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, before any work by this permit commences.

2. The well construction permit shall be for construction of the wells only. The wells shall be used for ground water quality monitoring, sampling, and testing only. No permanent pump may be installed and no water used from the wells without first obtaining a pump installation permit from the Commission.

3. The proposed well construction shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to construct the well shall not constitute a determination of correlative water rights.

4. The following shall be submitted to the Commission within thirty (30) days after completion of work for each well:
   a. Well completion report.
   b. Elevation (referenced to mean sea level, msl) survey by a Hawaii-licensed surveyor.
   c. As-built sectional drawing of the well.
   d. Plot plan and map showing the exact location of the well.

5. The applicant shall comply with all applicable laws, rules, and ordinances.
6. The permit may be revoked if work is not started within six (6) months after the date of issuance or if work is suspended or abandoned for six (6) months, unless otherwise specified. The work proposed in the well construction permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Commission upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Commission no later than three (3) months prior to the date the permit expires. If the commencement or completion date is not met, the Commission may revoke the permit after giving the permittee notice of the proposed action and an opportunity to be heard.

7. Upon completion of monitoring operations, the applicant shall obtain a well construction permit to seal the well with cement grout in a manner approved by the Commission.

________________
MICHAEL D. WILSON, Chairperson
Commission on Water Resource Management

AUG 3 1995
Date of Issuance

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed.

Applicant's Signature: ___________________________ Date: __________________

Printed Name: ________________________________

Firm or Title: ________________________________

Please sign the permit, return one copy of this permit to the Commission, and retain a copy for your record.

Attach.

cc: USGS
Department of Health
Safe Drinking Water Branch
Ground Water Protection Program
Wastewater Branch
Maui Department of Water Supply
TO: Michael D. Wilson, Chairperson  
Commission on Water Resource Management  

FROM: Rae M. Loui, Deputy Director  
Commission on Water Resource Management  

SUBJECT: Approval of Monitoring Well Construction  
Wailuku Landfill Monitor Wells (Well Nos. 5125-01, 02, 03)  

Applicant:  
County of Maui  
Department of Public Works and Waste Management  
200 South High Street  
Wailuku, Hawai‘i 96793  

Landowner:  
Same  

Action Requested: Permission to construct three 4.5-inch diameter monitor wells to depths 10 feet below mean sea level to be used for collecting groundwater samples for water quality assessments.  

Well Location/Tax Map Key: The well is located at Wailuku, Maui, at Tax Map Key 3-8-3:19 (see attached map).  

Well Description:  

<table>
<thead>
<tr>
<th></th>
<th>01</th>
<th>02</th>
<th>03</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground elevation:</td>
<td>305 ft.</td>
<td>215 ft.</td>
<td>240 ft.</td>
</tr>
<tr>
<td>Hole diameter:</td>
<td>4.5 in.</td>
<td>4.5 in.</td>
<td>4.5 in.</td>
</tr>
<tr>
<td>Solid casing depth:</td>
<td>295 ft.</td>
<td>205 ft.</td>
<td>230 ft.</td>
</tr>
<tr>
<td>Screen casing depth:</td>
<td>20 ft.</td>
<td>20 ft.</td>
<td>20 ft.</td>
</tr>
<tr>
<td>Open hole:</td>
<td>none</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>Total depth:</td>
<td>315 ft.</td>
<td>225 ft.</td>
<td>250 ft.</td>
</tr>
</tbody>
</table>

Agency Review: The application was circulated to the State Divisions of Historic Preservation and Aquatic Resources (DLNR), the Office of Hawaiian Affairs, the Departments of Hawaiian Home Lands and Health, Kaua‘i County Department of Water Supply, and to the Sierra Club Legal Defense Fund. No objections were filed.
Groundwater Presence: The wells will be located in the Kahului System of the Central Sector of Maui, with a sustainable yield estimated at 1 mgd.

Analysis: The proposed wells would be used to collect samples to determine the landfill's compliance with Department of Health regulations. Two large irrigation wells (over 10,000 gpm) pumping slightly brackish water are about one mile distant from the landfill. They are the nearest beneficiaries of this monitoring program. No adverse impacts are expected.

The Chairperson is authorized to approve well construction permits for monitor test holes and observation wells and for the sealing and abandonment of existing wells, through a submittal approved at a regular Commission meeting on February 15, 1989.

RECOMMENDATION:

That the Commission, via the Chairperson's signature, approve the issuance of well construction permits for Wailuku Landfill Monitor Wells 1, 2, and 3, (Well Nos. 5125-01, 02, 03). Please sign the attached permit.

Cl:ss
Attachment
TO: Michael D. Wilson, Chairperson
Commission on Water Resource Management

FROM: Rae M. Loui, Deputy Director
Commission on Water Resource Management

SUBJECT: Approval of Monitoring Well Construction
Wailuku Landfill Monitor Wells (Well Nos. 5125-01, 02, 03)

Applicant: County of Maui
Department of Public Works and Waste Management
200 South High Street
Wailuku, Hawai‘i 96793

Landowner: Same

Action Requested: Permission to construct three 4.5-inch diameter monitor wells to depths 10 feet below mean sea level to be used for collecting groundwater samples for water quality assessments.

Well Location/Tax Map Key: The well is located at Wailuku, Maui, at Tax Map Key 3-8-3:19 (see attached map).

<table>
<thead>
<tr>
<th>Well Description</th>
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</thead>
<tbody>
<tr>
<td>Ground elevation:</td>
<td>305 ft.</td>
<td>215 ft.</td>
<td>240 ft.</td>
</tr>
<tr>
<td>Hole diameter:</td>
<td>4.5 in.</td>
<td>4.5 in.</td>
<td>4.5 in.</td>
</tr>
<tr>
<td>Solid casing depth:</td>
<td>295 ft.</td>
<td>205 ft.</td>
<td>230 ft.</td>
</tr>
<tr>
<td>Screen casing depth:</td>
<td>20 ft.</td>
<td>20 ft.</td>
<td>20 ft.</td>
</tr>
<tr>
<td>Open hole:</td>
<td>none</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>Total depth:</td>
<td>315 ft.</td>
<td>225 ft.</td>
<td>250 ft.</td>
</tr>
</tbody>
</table>

Agency Review: The application was circulated to the State Divisions of Historic Preservation and Aquatic Resources (DLNR), the Office of Hawaiian Affairs, the Departments of Hawaiian Home Lands and Health, Kaua‘i County Department of Water Supply, and to the Sierra Club Legal Defense Fund. No objections were filed.
Groundwater Presence: The wells will be located in the Kahului System of the Central Sector of Maui, with a sustainable yield estimated at 1 mgd.

Analysis: The proposed wells would be used to collect samples to determine the landfill's compliance with Department of Health regulations. Two large irrigation wells (over 10,000 gpm) pumping slightly brackish water are about one mile distant from the landfill. They are the nearest beneficiaries of this monitoring program. No adverse impacts are expected.

The Chairperson is authorized to approve well construction permits for monitor test holes and observation wells and for the sealing and abandonment of existing wells, through a submittal approved at a regular Commission meeting on February 15, 1989.

RECOMMENDATION:

That the Commission, via the Chairperson's signature, approve the issuance of well construction permits for Wailuku Landfill Monitor Wells 1, 2, and 3, (Well Nos. 5125-01, 02, 03). Please sign the attached permit.

CI:ss
Attachment
July 10, 1995

MEMORANDUM

TO: Rae M. Loui, Deputy Director
Commission on Water Resources

FROM: Don Hibbard, Administrator
State Historic Preservation Division

SUBJECT: Historic Preservation Review of a Well Construction Permit Application for Wailuku-Landfill Monitor Wells 5125-01, 02, and 03. Wailuku, Maui
TMK: 3-8-03:19

Our review is based on historic reports, maps, and aerial photographs maintained at the State Historic Preservation Division; no field inspection was made of the subject parcel. A review of our records shows that there are no known historic sites at this parcel. Furthermore, historic land use of the landfill area included both quarry operations and sugar cane agriculture. Therefore, it is unlikely that any significant historic sites are still present in the vicinities of the proposed well sites. Thus, we believe that the well construction permit, if granted, will have "no effect" on significant historic sites.

Should you have any questions, please feel free to call Sara Collins at 587-0013.

SC:jen
Mr. Thomas Arizumi, Chief  
Environmental Management Division  
State Department of Health  
919 Ala Moana Blvd., 3rd Floor  
Honolulu, Hawaii 96814

Attn: Mr. Dennis Tulang

Dear Mr. Arizumi:

**Well Construction Permit Application**

Please review the following permit application pursuant to your area of concern and submit your comments to us by **JUL 10 1995**.

<table>
<thead>
<tr>
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<th>Well Name</th>
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<td>5125-01, 02, 03</td>
<td>Well Construction</td>
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</table>

Should you have any questions, please contact the Commission on Water Resource Management staff at 587-0251.

Sincerely,

RAE M. LOUI  
Deputy Director

---

Response:

- [ ] We have no objections  
- [ ] Not subject to our regulatory authority and permit  
- [ ] Comments attached  
- [ ] Additional information requested  
- [ ] Extended review period requested

Contact Person: LEN N. KAJIWARA  
Phone: 586-4294

Signed: LEN N. KAJIWARA  
Date: 7-11-95
TO: Dr. Don Hibbard, Director
Historic Preservation Program

Mr. William Devick
Division of Aquatic Resources

FROM: Rae M. Loui, Deputy Director
Commission on Water Resource Management

SUBJECT: Well Construction Permit Application

Please review the following permit application pursuant to your area of concern and submit your comments to us by JUN 10 1995.

Island | Well Name | Well No. | Application Type
--- | --- | --- | ---
Maui | Wailuku-Landfill Monitor Wells | 5125-01, 02, 03 | Well Construction

Should you have any questions, please contact the Commission on Water Resource Management staff at 587-0251.

Response:
( ) We have no objections
( ) Not subject to our regulatory authority and permit
( ) Comments attached
( ) Additional information requested
( ) Extended review period requested

Contact Person: Bill Devick
Phone: 587-0250
Date: 6-5-95

Signed: [Signature]
Date: [Signature]
APPLICATION FOR PERMIT
- Well Construction or □ Pump Installation

Instructions: Please print in ink or type and send completed application with attachments to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96820. Application must be accompanied by a non-refundable filing fee of $25.00 payable to the Dept. of Land and Natural Resources. The Commission may not accept incomplete applications. For assistance, call the Regulation Branch at 877-9225.

1. APPLICANT: (may be a, b, or c, but all must be filled in)
   (a) WELL OWNER
      County of Maui, Dept. of Public Works & Waste Management, Solid Waste Division
      Contact Person: David Wissmar
      Phone: 243-7843
      Address: 200 South High Street
      Wailuku, Maui, Hawaii 96793

   (b) LANDOWNER
      County of Maui, Dept. of Public Works & Waste Management, Solid Waste Division
      Contact Person: David Wissmar
      Phone: 243-7843
      Address: 200 South High Street
      Wailuku, Maui, Hawaii 96793

   (c) CONTRACTOR
      David Pico
      Waterwell Drilling
      Phone: 877-3419
      Address: 343 Ala Road
      Wailuku, Maui Hawaii 96793

2. WELL LOCATION/NAME: Southeast section of Phase II/WS-1
   Island: Maui
   Address: Central Maui Landfill, Pulehu Road
   Tax Map Key: (2) 3-8-03:19

   (Attach a USGS map, scale 1" = 200', and a property tax map showing well location referenced to established property boundaries.)

3. (a) PROPOSED WORK:
   Drill New Well
   □ After Location
   □ Modify Existing Well
   □ Redrill
   □ Install New Pump
   □ Replace Pump
   □ Modify Pump
   □ Be sure to complete and submit well abandonment report upon completion of work.

   (b) WELL TYPE:
   □ Dug
   □ Bored
   □ Driven
   □ Drilled
   □ Radial
   Is this well a part of a battery of wells? □ Yes □ No
   (Briefly describe and fill in the diagram on the back of this form.)

4. PROPOSED PUMP INFORMATION:
   Rated Pump Capacity: N/A gallons per minute

   Pump Type:
   □ Deep Well Turbine
   □ Rotary
   □ Rotary-Displacement
   □ Centrifugal
   □ Propeller
   □ Reciprocating
   □ Vane
   □ Impulse
   □ Piston
   □ Other
   □ Motor
   □ Dk
   □ Dx
   □ Ec
   □ Eo
   □ Ml
   □ Hf
   □ Oa
   □ W
   □ Other (explain)

5. PROPOSED USE:
   □ Municipal (including hotels, stores, etc.)
   □ Domestic (individual, noncommercial water sys.)
   □ Irrigation (crop)
   □ State Land Use District: □ Urban □ Agriculture
   □ Rural
   □ Conservation
   □ Agriculture (if more space is needed, continue below, remarks, explanations.)

6. (a) PROPOSED AMOUNT OF WITHDRAWAL:
   N/A gallons per day

6. (b) METHOD OF FLOW MEASUREMENT:
   □ Flow-meter
   □ Open-pipe
   □ Orifice Plate
   □ Weir

7. PENDING ACTIONS:
   □ CDUA
   □ SMA
   □ EIS
   □ EA
   □ NONE
   □ Other (explain)

8. REMARKS, EXPLANATIONS:
   5. Monitoring Well 7. Regulation requirements for
   State of Hawaii, DH, Ch. 11-58.1, Sec. 16 as well as Fed. Reg. Subtitle "P"
   CFR 258.54

   (If more space is needed, continue on back)

NOTE: Signing below indicates that the applicant understands that, if the permit requested is issued by the Commission on Water Resource Management, the proposed work is to be complete within 2 years of the approval date. In addition, the contractor shall submit to the Commission a well completion report, well abandonment report, or both, within 30 days after completion date of the permitted work. The applicant also understands that monthly water use data shall be submitted to the Commission. The applicant further understands that the proposed permit shall not constitute a determination of cumulative water rights and shall not guarantee the pump capacity or future uses up to the permitted pump capacity.
Drill a borehole to approximately 15 feet below the groundwater elevation, and install a 4.5-inch diameter PVC monitoring well. Three wells will be completed for use in collecting groundwater samples for water quality assessment.

**8. PROPOSED WELL SECTION**

- **Ground Elevation:** 305 ft., msd
- **Cement Grout:** 288 ft.
- **Bentonite Seal:** 2 ft.
- **Sand Well Packing:** 25 ft.
- **Hole Diameter:** 8 in.
- **Total Depth:** 315 ft.
- **Solid Casing:**
  - Material: PVC
  - Length: 295 ft.
  - Diameter: 4.5 in
  - Wall thickness: SCH 80
- **Casing:**
  - Perforated: 
  - Screen: 
  - Material: PVC
  - Length: 20 ft.
  - Diameter: 4.5 in
  - Wall thickness: SCH 80
  - Openings: 22 sq. in./L.F.
- **Open Hole:**
  - Length: None
  - Diameter: 

*Approximate elevation at time of filing application. Ground elevation above mean sea level (msd) by a surveyor licensed by the State must be submitted at start of construction. Final elevations of well components shall be submitted in the well completion/well abandonment report.*
Mr. David Craddick, Director
Department of Water Supply
County of Maui
200 South High Street
Wailuku, Hawaii 96793

Dear Mr. Craddick:

Well Construction Permit Application

Please review the following permit application pursuant to your area of concern and submit your comments to us by JUL 10 1995.

<table>
<thead>
<tr>
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<td>5125-01, 02, 03</td>
<td>Well Construction</td>
</tr>
</tbody>
</table>

Should you have any questions, please contact the Commission on Water Resource Management staff at 587-0251.

Sincerely,

RAE M. LOUI
Deputy Director

Response:

( ) We have no objections
( ) Not subject to our regulatory authority and permit
( ) Comments attached
( ) Additional information requested
( ) Extended review period requested

Contact Person: Ellen Kraftsou
Phone: 243-7835
Signed: Ellen Kraftsou for David Craddick
Date: 6/29/95
APPLICATION FOR PERMIT

Applicant(s): (a) WELL OWNER (b) LANDOWNER (c) CONTRACTOR

1. APPLICANT: (may be a, b, or c, but all must be filled in)
   (a) WELL OWNER: County of Maui, Dept. of Public Works & Waste Management, Solid Waste Division
   Contact Person: David Kleemar Ph: 243-7843
   Address: 200 South High Street
   Wailuku, Maui, Hawaii 96793

   (b) LANDOWNER: County of Maui, Dept. of Public Works & Waste Management, Solid Waste Division
   Contact Person: David Kleemar Ph: 243-7843
   Address: 200 South High Street
   Wailuku, Maui, Hawaii 96793

   (c) CONTRACTOR: David Pico
   Firm/Name: Waterwell Drilling Ph: 877-3419
   Address: 343 Ali Road
   Wailuku, Maui Hawaii 96793

2. WELL LOCATION/NAME: Southeast section of Phase I/Map-1
   Island: Maui
   Address: Central Maui Landfill, Pulehu Road
   Tax Map Key: (2) 3-8-0319
   (Attach a USGS map, scale 1" = 2007, and a property tax map showing well location referenced to established property boundaries.)

3. (a) PROPOSED WORK: (b) WELL TYPE:
   Drill New Well
   Modify Existing Well
   Install New Pump
   Replace Pump
   Deepen
   * Abandon/Seal
   * Be sure to complete and submit well abandonment report upon completion of work.
   Drill
   Bored
   Driven
   Dug
   Drilled

   Is this well a part of a battery of wells? Yes No
   (Briefly describe and fill in the diagram on the back of this form.)

4. PROPOSED PUMP INFORMATION: Rated Pump Capacity: N/A gallons per minute
   Pump Type:
   - Deep Well Turbine
   - Submersible
   - Centrifugal
   - Rotary
   - Rotary-Displacement
   - Rotary-Gear
   - Propeller
   - Reciprocating
   - Impulse
   Motor:
   - Gas
   - Electric, rated horsepower of

5. PROPOSED USE:
   - Municipal (including hotels, stores, etc.)
   - Domestic (individual, noncommercial water system)
   - Irrigation (crop)
   - Industrial
   - Other (explain)
   State Land Use District:
   - Urban
   - Agriculture
   - Rural
   - Conservation
   County Zoning (designate):
   (If more space is needed, continue below under remarks, explanations.)

6. (a) PROPOSED AMOUNT OF WITHDRAWAL: N/A gallons per day
   (b) METHOD OF FLOW MEASUREMENT:
   - Flow-meter
   - Open-pipe
   - Orifice Plate
   - Weir

7. PENDING ACTIONS:
   - CDUA
   - SMA
   - EIS
   - OMA
   - None
   - Other (explain)
   (If more space is needed, continue on back)

8. REMARKS, EXPLANATION:
   5. Monitoring Well
   7. Regulation requirements for State of Hawaii, DH, Ch. 11-58.1, Sec. 16 as well as Fed. Reg. Subtitle "P"
   CFR 258.54
   (If more space is needed, continue on back)

NOTE: Signing below indicates that the applicant understands that, if the permit request is granted by the Commission on Water Resource Management, the proposed work is to be complete within two (2) years of the approval date. In addition, the contractor will submit to the Commission a well completion report, well abandonment report, or both, within 30 days after completion date of the permitted work. The applicant also understands that monthly water use data shall be submitted to the Commission. The applicant further understands that approval of the proposed permit is not the endorsement or acceptance of a determination of construction and does not guarantee the permit’s use or suitability for the permitted pump capacity.

Well Owner: County of Maui, Dept. of Public Works & Waste Management
Landowner: County of Maui, Dept. of Public Works & Waste Management
Contractor: Waterwell Drilling

Signature
Date 5/22/95

For Official Use Only:
Date Received ___________________________
Date Approved __________________________
Field Checked By _________________________
Date ___________________________

Longitude ___________________________
Aquifer System Name _______________________
State Well No. ___________________________
Drill a borehole to approximately 15 feet below the groundwater elevation, and install a 4.5-inch diameter PVC monitoring well. Three wells will be completed for use in collecting groundwater samples for water quality assessment.

9. PROPOSED WELL SECTION

**Ground Elevation:** 305 ft., mal

- **Elevation at top of casing:** 308 ft., mal
- **Cement Grout:** 288 ft.
- **Bentonite Seal:** 2 ft.
- **Sand:** 25 ft.
- **Hole Diameter:** 8 in.
- **Total Depth:** 315 ft.

**Solid Casing:**
- **Material:** PVC
- **Length:** 295 ft.
- **Diameter:** 4.5 in
- **Wall thickness:** SCH 80

**Casing:**
- **Material:** PVC
- **Length:** 20 ft.
- **Diameter:** 4.5 in
- **Wall thickness:** SCH 80
- **Openings:** 22 sq. in./L.F.

**Open Hole:**
- **Length:** None
- **Diameter:** None

*Approximate elevation at time of filing application. Ground elevation above mean sea level (mal) by a surveyor licensed by the State must be submitted at start of construction. Final elevations of well components shall be submitted in the well completion/well abandonment reports.
WAILUKU — LANDFILL MONITOR WELLS
(5125-01, 02, 03 M)
TO: Anne Furuuchi, Fiscal Management Officer  
   Fiscal Office
FROM: Rae M. Loui, Deputy Director  
   Commission on Water Resource Management
SUBJECT: Check Reimbursement

Please be advised that a filing fee was erroneously deposited to the State account, and we request a reimbursement check for the full amount of $75.00, payable to Masa Fujioka and Associates. A copy of the deposit receipt dated 6/21/95 is attached for your reference.

The fee was filed for a project in which Fujioka was the agent for Maui County Department of Public Works and Waste Management. Government agencies are exempt from the filing requirements.

Your prompt attention is appreciated. If you have questions, please call Charley Ice at 7-0251.
TO: Honorable Kali Watson, Director  
Department of Hawaiian Home Lands  
Honorable Clayton H.W. Hee, Chairman and Trustee At Large  
Office of Hawaiian Affairs

FROM: Michael D. Wilson, Chairperson
Commission on Water Resource Management

SUBJECT: Well Construction Permit Application

Please review the following permit application pursuant to your area of concern and submit your comments to us by JUL 10 1995.

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Should you have any questions, please contact the Commission on Water Resource Management staff at 587-0251.

Enc.

Response: 
- [ ] We have no objections 
- [ ] Not subject to our regulatory authority and permit 
- [ ] Comments attached 
- [ ] Additional information requested 
- [ ] Extended review period requested

Contact Person: Luis A. Manrique

Signed: Luis O. Hejje

Phone: 599-1935
Date: 06/27/95
Mr. Thomas Arizumi, Chief
Environmental Management Division
State Department of Health
919 Ala Moana Blvd., 3rd Floor
Honolulu, Hawaii 96814

Attn: Mr. William Wong

Dear Mr. Arizumi:

Well Construction Permit Application

Please review the following permit application pursuant to your area of concern and submit your comments to us by JUL 10, 1995.

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Should you have any questions, please contact the Commission on Water Resource Management staff at 587-0251.

Sincerely,

[Signature]

RAE M. LOUI
Deputy Director

Response:

( ) We have no objections
( ) Not subject to our regulatory authority and permit
( ) Comments attached
( ) Additional information requested
( ) Extended review period requested

Contact Person: _______________________________ Phone: __________________
Signed: _______________________________ Date: __________________

Cl: ss
Enc.
Well Construction Permit Application

Please review the following permit application pursuant to your area of concern and submit your comments to us by **JUL 10 1995**.

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Should you have any questions, please contact the Commission on Water Resource Management staff at 587-0251.

Sincerely,

RAE M. LOUI  
Deputy Director

---

Response:

- [ ] We have no objections
- [ ] Not subject to our regulatory authority and permit
- [ ] Comments attached
- [ ] Additional information requested
- [ ] Extended review period requested

Contact Person: ____________________________  Phone: ____________________________

Signed: ____________________________  Date: ____________________________
TO: Dr. Don Hibbard, Director  
Historic Preservation Program

Mr. William Devick  
Division of Aquatic Resources

FROM: Rae M. Loui, Deputy Director  
Commission on Water Resource Management

SUBJECT: Well Construction Permit Application

Please review the following permit application pursuant to your area of concern and submit your comments to us by JUN 10, 1995.

Island   Well Name            Well No.            Application Type
Maui     Wailuku-Landfill Monitor Wells  5125-01, 02, 03  Well Construction

Should you have any questions, please contact the Commission on Water Resource Management staff at 587-0251.

Response:
() We have no objections
() Not subject to our regulatory authority and permit
() Comments attached
() Additional information requested
() Extended review period requested

Contact Person: ___________________________  Phone: ______________

Signed: ___________________________  Date: ___________________________
TO: Honorable Kali Watson, Director
Department of Hawaiian Home Lands

Honorable Clayton H.W. Hee, Chairman and Trustee At Large
Office of Hawaiian Affairs

FROM: Michael D. Wilson, Chairperson
Commission on Water Resource Management

SUBJECT: Well Construction Permit Application

Please review the following permit application pursuant to your area of concern and submit your comments to us by Jul 10, 1995.

Island    Well Name                          Well No.     Application Type
Maui      Wailuku-Landfill Monitor Wells    5125-01, 02, 03 Well Construction

Should you have any questions, please contact the Commission on Water Resource Management staff at 587-0251.

Enc.

Response:

() We have no objections
() Not subject to our regulatory authority and permit
() Comments attached
() Additional information requested
() Extended review period requested

Contact Person: _______________________________ Phone: ______________

Signed: ______________________________________ Date: ______________
Mr. David Craddick, Director
Department of Water Supply
County of Maui
200 South High Street
Wailuku, Hawaii 96793

Dear Mr. Craddick:

Well Construction Permit Application

Please review the following permit application pursuant to your area of concern and submit your comments to us by JUL 10 1995.

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Should you have any questions, please contact the Commission on Water Resource Management staff at 587-0251.

Sincerely,

[Signature]

RAE M. LOUI
Deputy Director

Response:

() We have no objections

() Not subject to our regulatory authority and permit

() Comments attached

() Additional information requested

() Extended review period requested

Contact Person: ___________________________ Phone: _____________

Signed: ___________________________ Date: ________________
Ms. Marjorie Ziegler
Sierra Club Legal Defense Fund, Inc.
223 South King Street, Suite 400
Honolulu, Hawaii 96813

Dear Ms. Ziegler:

Well Construction Permit Application

Please review the following permit application pursuant to your area of concern and submit your comments to us by JUL 10 1995.

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Should you have any questions, please contact the Commission on Water Resource Management staff at 587-0251.

Sincerely,

[Signature]

RAE M. LOUI
Deputy Director

Response:

- () We have no objections
- () Not subject to our regulatory authority and permit
- () Comments attached
- () Additional information requested
- () Extended review period requested

Contact Person: _____________________________ Phone: ______________

Signed: _____________________________ Date: ______________
PAY TO THE ORDER OF Department of Land & Natural Resources $75.00

*****Seventy five and no/100*****

Well permit application fee
For Job #94128-001

DEPARTMENT OF LAND AND NATURAL RESOURCES

<table>
<thead>
<tr>
<th>DOCUMENT NO.</th>
<th>UAC OR ATTACHED WORKSHEET</th>
<th>DATE: JUN 20 1995</th>
</tr>
</thead>
<tbody>
<tr>
<td>F YR APP D SRC/ OBJ COST CTR PROJECT PH ACT</td>
<td>AMOUNT</td>
<td>NAME/DESCRIPTION (WANG INPUT)</td>
</tr>
<tr>
<td>G 00 000 C 1026 0752</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1) $75.00</td>
<td>Bank of Hawaii</td>
</tr>
<tr>
<td></td>
<td>(2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(3)</td>
<td></td>
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<td></td>
<td>(4)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TOTAL $75.00</td>
<td></td>
</tr>
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</table>

REMARKS:
LINE (1) Wailuku-PW Monitor Well (No. 5125-01, 02, 03)
LINE (2)
LINE (3)
LINE (4)
MASA FUJIOKA & ASSOCIATES
A PROFESSIONAL PARTNERSHIP
ENVIRONMENTAL • GEOTECHNICAL • HYDROGEOLOGICAL CONSULTANTS

99-1205 HALAWA VALLEY STREET, SUITE 302
AIEA, HAWAII 96701-3281
Phone 808 484-5366 • Fax 808 484-0007

LETTER & TRANSMITTAL

State of Hawaii
Commission on Water Resource Management
Department of Land and Natural Resources
P.O. Box 621
Honolulu, HI 96809

TO
ATTENTION
RE:

WE ARE SENDING YOU xxx Attached ☐ Under separate cover via __________________ the following items:
☐ Reports ☐ Prints ☐ Plans ☐ Samples ☐ Specifications
☐ Copy of letter ☐ Change order xxx Applications for permit/filling fee

<table>
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<th>COPIES</th>
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<tbody>
<tr>
<td>1</td>
<td>5/19/95</td>
<td>Application for Permit Well Construction-Southeast section of Phase I/MW-1</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>5/19/95</td>
<td>Application for Permit Well Construction-Northwest section of Phase II/MW-3</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>5/19/95</td>
<td>Application for Permit Well Construction-North section of Phase III/MW-2</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>5/19/95</td>
<td>Tax Map (location of Groundwater Monitoring Well)</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>5/19/95</td>
<td>USGS Map PAIA Quadrangle</td>
<td></td>
</tr>
</tbody>
</table>

THESE ARE TRANSMITTED as checked below:
☐ For approval ☐ Approved as submitted ☐ Resubmit ___ copies for approval
☐ For your use ☐ Approved as noted ☐ Submit ___ copies for distribution
☐ As requested ☐ Returned for corrections ☐ Return ___ corrected prints
☐ For review and comment ☐ FOR BIDS DUE ___________________ 19 ☐ PRINTS RETURNED AFTER LOAN TO US

REMARKS
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

COPY TO ________________________________________________________________

SIGNED: __________________________, Associate

If enclosures are not as noted, kindly notify us at once.
APPLICATION FOR PERMIT

Well Construction or □ Pump Installation

Instructions: Please print in ink or type and send completed application with attachments to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. Application must be accompanied by a non-refundable filing fee of $25.00 payable to the Dept. of Land and Natural Resources. The Commission may not accept incomplete applications. For assistance, call the Regulation Branch at 587-0225.

1. APPLICANT: (may be a, b, or c, but all must be filled in)
   (a) WELL OWNER
      County of Maui, Dept. of Public Works & Waste Management, Solid Waste Division
      Firm/Name: David Whese
      Address: 200 South High Street
      Wailuku, Maui, Hawaii 96793

   (b) LANDOWNER
      County of Maui, Dept. of Public Works & Waste Management, Solid Waste Division
      Firm/Name: David Whese
      Address: 200 South High Street
      Wailuku, Maui, Hawaii 96793

   (c) CONTRACTOR
      David Pico
      Waterwell Drilling
      Address: 343 Aiu Road
      Wailuku, Maui Hawaii 96793

2. WELL LOCATION/NAME: Southeast section of Phase I (may-1)
   Island: Maui
   Address: Central Maui Landfill, Pulehu Road
   (Attach a USGS map, scale 1"=2000', and a property tax map showing well location referenced to established property boundaries.)

3. (a) PROPOSED WORK:
   Drill New Well
   Modify Existing Well
   Install New Pump
   Deepen
   * Abandon/Seal
   * Be sure to complete and submit well abandonment report upon completion of work.

(b) WELL TYPE:
   Dug
   Bored
   Driven
   Drilled
   Radial
   Is this well a part of a battery of wells?
   Yes
   No
   (Briefly describe and fill in the diagram on the back of this form.)

4. PROPOSED PUMP INFORMATION:
   Rated Pump Capacity: N/A gallons per minute
   Motor:
   Diesel
   Gas
   Electric, rated horsepower of

5. PROPOSED USE:
   Municipal (including hotels, stores, etc.)
   Military
   Domestic (individual, noncommercial water use.)
   Industrial
   Irrigation (crop)
   Other (explain)
   State Land Use District: Urban
   Agriculture
   Rural
   Conservation
   County Zoning (describe) Agriculture
   (If more space is needed, continue below under remarks, explanations.)

6. (a) PROPOSED AMOUNT OF WITHDRAWAL: N/A gallons per day
   (b) METHOD OF FLOW MEASUREMENT:
   Flow-meter
   Open-pipe
   Orifice Plate
   Weir

7. PENDING ACTIONS:
   CDUA
   SNA
   EIS
   EA
   NONE
   Other (explain)

8. REMARKS, EXPLANATIONS:
   CFR 258.54

   (If more space is needed, continue on back)

NOTE: Signing below indicates that the applicant understands that, if the permit requested is granted by the Commission on Water Resource Management, the proposed work is to be completed within two (2) years of the approval date. In addition, the contractor shall submit to the Commission a well completion report, well abandonment report, or both, within 30 days after completion date of the permitted work. The applicant also understands that monthly water use data shall be submitted to the Commission. The applicant further understands that approval of the proposed permit shall not constitute a determination of navigable water rights and shall not guarantee the pump capacity or future use up to the permitted pump capacity.
**9. PROPOSED WELL SECTION**

- **Elevation at top of casing:** 308 ft, msl
- **Ground Elevation:** 305 ft, msl
- **Cement Grout:** 288 ft
- **Bentonite Seal:** 2 ft
- **Sand Spot Packing:** 25 ft
- **Hole Diameter:** 8 in
- **Total Depth:** 315 ft

**Solid Casing:**
- **Material:** PVC
- **Length:** 295 ft
- **Diameter:** 4.5 in
- **Wall thickness:** SCH 80

**Casing Options:**
- **Perforated Screen**
- **Material:** PVC
- **Length:** 20 ft
- **Diameter:** 4.5 in
- **Wall thickness:** SCH 80
- **Openings:** 22 sq. in./L.F.

**Open Hole:**
- **Length:** None
- **Diameter:**

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*Approximate elevation at time of filing application. Ground elevation above mean sea level (msl) by a surveyor licensed by the State must be submitted at start of construction. Final elevations of well components shall be submitted in the well completion/well abandonment reports.*
APPLICATION FOR PERMIT

Well Construction or Pump Installation

Instructions: Please print in ink or type and sign completed application with attachments to the Commission on Water Resource Management, P.O. Box 821, Honolulu, Hawaii 96809. Application must be accompanied by a non-refundable filing fee of $25.00 payable to the Dept. of Land and Natural Resources. The Commission may not accept incomplete applications. For assistance, call the Regulation Branch at 808-668-0225.

1. APPLICANT: (may be a, b, or c, but all must be filled in)
   (a) WELL OWNER
   County of Maui, Dept. of Public Works & Waste
   Firm/Name: Waterwell Drilling
   Address: 343 Ali Road
   Contact Person: David Pico
   Ph: 877-3419
   Contractor's C-57 License No: ABC 2291
   Island: Maui
   Address: Central Maui Landfill, Pulau Road
   Tax Map Key: (2) 3-8-0319
   (Attach a USGS map, scale 1" = 2000, and a property tax map showing well location referenced to established property boundaries.)

2. WELL LOCATION/NAME: North section of Phase III/M-2 Island: Maui
   (a) PROPOSED WORK:
   Drill New Well
   Modify Existing Well
   Install New Pump
   * After Location
   * Abandon/Seal

   (b) WELL TYPE:
   Dug
   Bored
   Driven
   Drilled
   Radial

   Is this well a part of a battery of wells? Yes
   No (Briefly describe and fill in the diagram on the back of this form.)

   (c) LANDOWNER
   County of Maui, Dept. of Public Works & Waste
   Firm/Name: Waterwell Drilling
   Address: 343 Ali Road
   Contact Person: David Pico
   Ph: 877-3419
   Island: Maui
   Address: Central Maui Landfill, Pulau Road
   Tax Map Key: (2) 3-8-0319
   (Attach a USGS map, scale 1" = 2000, and a property tax map showing well location referenced to established property boundaries.)

4. PROPOSED PUMP INFORMATION:
   Rated Pump Capacity: N/A gallons per minute
   Motor:
   Diesel
   Gas
   Electric, rated horsepower of

5. PROPOSED USE:
   Municipal (including hotels, stores, etc.)
   Domestic (individual, noncommercial water syst.)
   Irrigation (crop)
   State Land Use District:
   Urban
   Agriculture
   Rural
   Conservation

   (If more space is needed, continue below under remarks, explanations.)

6. (a) PROPOSED AMOUNT OF WITHDRAWAL:
   N/A gallons per day

   (b) METHOD OF FLOW MEASUREMENT:
   Flow-meter
   Open-pipe
   Orifice Plate
   Weir

7. PENDING ACTIONS:
   CDUA
   SMA
   EIS
   EA
   NONE
   Other (explain)

8. REMARKS, EXPLANATIONS:
   5. Monitoring Well
   7. Regulation requirements for
   State of Hawaii, DH, Ch. 11-58.1, Sec. 16 as well as Fed. Req. Subtitle "P"
   CFR 258.54

   (If more space is needed, continue on back)

NOTE: Signing below indicates that the applicant understands that, if the permit requested is granted by the Commission on Water Resource Management, the proposed work is to be complete within (2) years of the approval date. In addition, the contractor shall submit to the Commission a well completion report, well abandonment report, or both within 30 days after the completion date of the permitted work. The applicant also understands that monthly water use data shall be submitted to the Commission. The applicant further understands that approval of the proposed permit shall not constitute a determination of water rights and shall not guarantee any pump capacity or future use up to the permitted pump capacity.

For Official Use Only:
Date Received
Date Accepted
Field Checked By
Date
Longitude
Aquifer System Name
State Well No.
9. PROPOSED WELL SECTION

**Remarks, Explanations (cont'd):** Drill a borehole to approximately 0 feet below the groundwater elevation, and install a 4.5 inch diameter PVC monitoring well. Three wells will be completed for use in collecting groundwater samples for water quality assessment.

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**Ground Elevation:** 215 ft.; mal

**Cement Grout:** 198 ft.

**Bentonite Seal:** 2 ft.

**Sand Stock Packing:** 25 ft.

**Hole Diameter:** 8 in.

**Total Depth:** 225 ft.

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**Solid Casing:**
- **Material:** PVC
- **Length:** 20 ft.
- **Diameter:** 4.5 in.
- **Wall thickness:** SCH 80

**Open Hole:**
- **Length:** None
- **Diameter:** None

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*Approximate elevation at time of filing application. Ground elevation above mean sea level (mal) by a surveyor licensed by the State must be submitted at start of construction. Final elevations of well components shall be submitted in the well completion/well abandonment reports.*
APPLICATION FOR PERMIT

[ ] Well Construction  [ ] Pump Installation

Instructions: Please print in ink or type and send completed application with attachments to the Commission on Water Resource Management, P.O. Box 821, Honolulu, Hawaii 96809. Application must be accompanied by a non-refundable filing fee of $25.00 payable to the Dept. of Land and Natural Resources. This Commission may accept incomplete applications. For assistance, call the Regulation Branch at 587-0225.

1. APPLICANT: (may be a, b, or c, but all must be filled in)
(a) WELL OWNER
County of Maui, Dept. of Public Works & Waste
Firm/Name: Management, Solid Waste Division
Contact Person: David Wissmar
Address: 200 South High Street
Wailuku, Maui, Hawaii 96793
(b) LANDOWNER
County of Maui, Dept. of Public Works & Waste
Firm/Name: Management, Solid Waste Division
Contact Person: David Wissmar
Address: 200 South High Street
Wailuku, Maui, Hawaii 96793
(c) CONTRACTOR
David Pico
Firm/Name: Waterwell Drilling
Address: 343 Alu Road
Wailuku, Maui Hawaii 96793
Contractor's C-57 License No.: ABC 2291

2. WELL LOCATION/NAME: Northwest section of Phase II/A4-3 Island: Maui
Address: Central Maui Landfill, Pulehu Road
Tax Map Key: (2) 3-8-03:19
(Attach a USGS map, scale 1" = 2000, and a property tax map showing well location referenced to established property boundaries.)

3. (a) PROPOSED WORK:
   [ ] Drill New Well
   [ ] Modify Existing Well
   [ ] Redrill
   [ ] Deepen
   [ ] Abandon/Seal

   * Be sure to complete and submit well abandonment report upon completion of work.

(b) WELL TYPE:
   [ ] Dug
   [ ] Bored
   [ ] Driven
   [ ] Drilled
   [ ] Radial

   Is this well a part of a battery of wells? [ ] Yes [ ] No

   (Briefly describe and fill in the diagram on the back of this form.)

4. PROPOSED PUMP INFORMATION:
   Rated Pump Capacity: N/A gallons per minute

<table>
<thead>
<tr>
<th>Pump Type</th>
<th>Motor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deep Well Turbine</td>
<td>Diesel</td>
</tr>
<tr>
<td>Submersible</td>
<td>Gas</td>
</tr>
<tr>
<td>Centrifugal</td>
<td>Electro, rated horsepower of</td>
</tr>
<tr>
<td>Rotary</td>
<td>Propeller</td>
</tr>
<tr>
<td>Rotary-Displacement</td>
<td>Pedestalizing</td>
</tr>
<tr>
<td>Rotary-Gear</td>
<td>Impulse</td>
</tr>
</tbody>
</table>

5. PROPOSED USE:
   [ ] Municipal (including hotels, stores, etc.)
   [ ] Military
   [ ] Domestic (individual, noncommercial water use)
   [ ] Industrial
   [ ] Irrigation (crop)
   [ ] Other (explain)

   State Land Use District:
   [ ] Urban
   [ ] Agriculture
   [ ] Rural
   [ ] Conservation

   County Zoning (describe):
   Agriculture

   (If more space is needed, continue below under remarks, explanations.)

6. (a) PROPOSED AMOUNT OF WITHDRAWAL:
   N/A gallons per day

(b) METHOD OF FLOW MEASUREMENT:
   [ ] Flow-meter
   [ ] Open-pipe
   [ ] Office Plate
   [ ] Weir

7. PENDING ACTIONS:
   [ ] CDUA
   [ ] SMA
   [ ] EIS
   [ ] EA
   [ ] NONE
   [ ] Other (explain)

8. REMARKS, EXPLANATIONS:
   5. Monitoring Well
   7. Regulation requirements for State of Hawaii, DHE, Ch. 11-58.1, Sec. 16 as well as Fed. Reg. Subtitle "D"

CER 258.54

(If more space is needed, continue on back)

NOTE: Signing below indicates that the applicant understands that, if the permit requested is granted by the Commission on Water Resource Management, the proposed work is to be completed within two (2) years of the approval date. In addition, the contractor shall submit to the Commission a well completion report, well abandonment report, or both, within 30 days after completion date of the permitted work. The applicant also understands that monthly water use data shall be submitted to the Commission. The applicant further understands that approval of the proposed permit shall constitute a determination of corrective water rights and shall not guarantee the pump capacity or future use up to the permitted pump capacity.

For Official Use Only:
Date Received
Date Accepted
Field Checked By
Date
Longitude
Aquifer System Name
State Well No.
Drill a borehole to approximately 200 feet below the groundwater elevation, and install a 4.5-inch diameter PVC monitoring well. Three wells will be completed for use in collecting groundwater samples for water quality assessment.

9. PROPOSED WELL SECTION

- Elevation at top of casing: 243 ft., msl.
- Ground Elevation: 240 ft., msl.
- Cement Grout: 223 ft.
- Bentonite Seal: 2 ft.
- Casing:
  - PVC
  - Length: 230 ft.
  - Diameter: 4.5 in.
  - Wall thickness: SCH 80
  - Perforated: No
  - Screen: No
- Open Hole: None

*Approximate elevation at time of filing application. Ground elevation above mean sea level (msl) by a surveyor licensed by the State must be submitted at start of construction. Final elevations of well components shall be submitted in the well completion/well abandonment reports.