CHECKLIST

Type of Permit: \(\times\) 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 Maui Fujioka & Assoc. TMK 3-8-3 : 19

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

Copies Sent for Review

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Bulletin 15 Jun for July 95

to Agenda ____________
Submittal ____________ to Appl ____________
CWRM _ Appr _ Deny ____________
Permit/Notice to Appl ____________
WAILUKU — LANDFILL MONITOR WELLS
(5125-01, 02, 03 M)
FAX: Transmitting 9 pages, including this one; call 587-0251 with any reception problems.

TO: Ron Boyle, Jem Goethals
FROM: Charley Ice

Date: 30 March 01

Transmitting permits for MW 4-6, Central Maui Landfill Monitor Wells.
They are also faxed separately to Andy Hirose, Maui DPW.

Jem
9-128 1990

Ron Boyle (handwritten)
523 8874
f: 523 8750

Return Fax: 587-0219
Return Post: P.O.Box 621, Honolulu 96809
FAX: Transmitting 5 pages, including this one; call 587-0251 with any reception problems.

TO: Jenn Goethals

FROM: Charley 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.
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PLEASE: See Me
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         Take Action
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         Type Final
         File
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02/95
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*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

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.

April 1, 1996
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.
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).

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. WISSMAN

Firm or Title: CHIEF, SOLID WASTE DIV., COUNTY OF MENDOTA

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.
WAILUKU - LANDFILL MONITOR WELLS
(5125-01, 02, 03 M)
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.
AQUIFER TEST DATA

County: __________________________
Observation well no.: __________________________

Location: __________________________
Pumped well no.: __________________________

Average Q: __________ gpm

Distance between Observation & Pumped Well ______ ft.

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Table 1
LETTER OF TRANSMITTAL

DATE: Dec. 4, 1995
JOB NO.: 94128-001

ATTENTION: Division of Water Resource Management

RE: 95 DEC 7 A9:52

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

WE ARE SENDING YOU □ Attached □ Under separate cover via ______________________ the following items:

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

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THERE 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: County of Maui
Attn: Mr. Dave Wissmar

SIGNED: Jennifer J. Kleveno, Associate
WELL_COMPLETION_REPORT

A. STATE_WELL_NO. 5125-03  
WELL NAME Ml-3 95 DEC 7  
ISLAND Maui

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  
Sept. 27, 1995

G. GROUND_ELEVATION (mal)  
241.19 ft.

H. TOTAL_DEPTH_OF_WELL_BELOW_GROUND  
258 ft.

I. HOLE_SIZE  
8 inch dia. from 0 ft. to 260 ft. below ground

J. CASING_INSTALLED:  
4.5 in. I.D. x 6 ft. wall solid section to 233 ft. below ground

K. ANNULUS:  
Grounded from 0 ft. to 229 ft. below ground

L. PERMANENT_PUMP_INSTALLATION:  
Pump type, make, serial No. 4.4 Stainless steel submersible Grundfos Capacity 6 gpm

M. PROPOSED_USE  
Groundwater monitoring

N. INITIAL_WATER_LEVEL  
238.48 ft. below ground.

O. INITIAL_CHLORIDE  
ppm

P. PUMPING_TESTS:  
Reference point (R.P.) used:  
Date and time of measurement 8/10/95/10:10 am

Q. DRILLER'S_LOG:  
Rock Description & Remarks  
Depth (ft.)  
Water Level

R. REMARKS:

Submitted by (print)  
Jennifer J. Kleveno  
Title  
Masa Fujikawa & Associates  
Associate

FOR OFFICIAL USE  
Latitude 20°51.43′  
Longitude 156°25.18′  
Well No. 5125-03

FOR DRILLER'S USE  
Job Name  
Job No.
BORING/WELL: MW-3

**BORING LOG**

- **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**

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Sample</th>
<th>CL</th>
<th>CL/ Rock</th>
<th>Rock</th>
<th>Rock/ gravel</th>
<th>Rock</th>
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<tbody>
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</tbody>
</table>

- **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.**

**WELL SCHEMATIC**

- 8-inch diameter borehole
- 1.25-inch diameter PVC Schedule 80 riser pipe
- 4.5-inch diameter PVC Schedule 80 well casing
- Cement Grout
- Centralizer
- 2 feet above ground surface
- Locking well monument

---

Masa Fujio & Associates
Environmental · Geotechnical · Hydrogeological Consultants

5125-03

Maui Central Landfill
Puunene, Maui, Hawaii
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

100

Rock decrease in olivine.

120

Soft basalt, vesicular, some cinder, decrease in olivine.
Hammers to a soft power.

130

Medium hard basalt, less vesicular.

Olivine crystals to 1-3 %.

180

Soft basalt, decrease in olivine to <1%, hammers to powder.

BORING LOG
AND WELL SCHEMATIC

MAUI CENTRAL LANDFILL
Puunene, Maui, Hawaii
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

WELL SCHEMATIC

Lithologic Description

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Sample Depth (ft)</th>
<th>USCS Graphic Log</th>
<th>USCS Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>Rock</td>
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<tr>
<td>300</td>
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<td></td>
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</tr>
</tbody>
</table>

- Gray basalt, medium hard.
- Gray basalt, with plagioclase crystals.
- Groundwater
- Total depth drilled 260 feet below grade.

BORING LOG
AND WELL SCHEMATIC

MAU MAU CENTRAL LANDFILL
Puunene, Maui, Hawaii
**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 573, Honolulu, Hawaii 96809. An as-built drawing of the well and chemical analysis, if available, should also be submitted. If necessary, phone 548-7245, Hydrology, Geology Section for Assistance.

<table>
<thead>
<tr>
<th>A. STATE WELL NO.</th>
<th>5125-02</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELL NAME</td>
<td>Mo-2</td>
</tr>
<tr>
<td>LOCATION</td>
<td>Central Maui Landfill</td>
</tr>
<tr>
<td>TAX MAP KEY</td>
<td>3-8-03:2</td>
</tr>
<tr>
<td>C. WELL OWNER</td>
<td>County of Maui, Solid Waste Division</td>
</tr>
<tr>
<td>D. DRILLING OR PUMP INSTALLATION CONTRACTOR</td>
<td>David Pico Waterwell Drilling</td>
</tr>
<tr>
<td>E. TYPE OF RIG</td>
<td>Air Hammer</td>
</tr>
<tr>
<td>DRILLER</td>
<td>David Pico</td>
</tr>
<tr>
<td>F. DATE OF WELL COMPLETION</td>
<td>Nov. 9, 1995</td>
</tr>
<tr>
<td>DATE OF PUMP INSTALLATION</td>
<td>Oct. 4, 1995</td>
</tr>
<tr>
<td>G. GROUND ELEVATION (mai)</td>
<td>221.27 ft.</td>
</tr>
<tr>
<td>H. TOTAL DEPTH OF WELL BELOW GROUND</td>
<td>238 ft.</td>
</tr>
<tr>
<td>I. HOLE SIZE</td>
<td>8 inch dia. from 0 ft. to 245 ft. below ground</td>
</tr>
<tr>
<td>J. CASING INSTALLED:</td>
<td></td>
</tr>
<tr>
<td>1-5/16 in. I.D. x 9/16 in. wall solid section to 213 ft. below ground</td>
<td></td>
</tr>
<tr>
<td>2-3/4 in. I.D. x 9/16 in. wall perforated section to 233 ft. below ground</td>
<td></td>
</tr>
<tr>
<td>Type of perforation</td>
<td>4 Rows, 1/4&quot; sp. Slot 0.020&quot;</td>
</tr>
<tr>
<td>K. ANNULUS:</td>
<td>Grouted from 0 ft. to 209.8 ft. below ground</td>
</tr>
<tr>
<td>L. PERMANENT PUMP INSTALLATION:</td>
<td>Pump type, make, serial No. 4&quot; Stainless steel submersible Grundfos Capacity 6 gpm Motor type, H.P., voltage, P.S.I.: 10HP Franklin Motor, 230/460</td>
</tr>
<tr>
<td>Depth of pump intake setting</td>
<td>233 ft. below ground</td>
</tr>
<tr>
<td>Depth of bottom of airline</td>
<td>11.72 ft.</td>
</tr>
<tr>
<td>M. PROPOSED USE</td>
<td>Groundwater monitoring</td>
</tr>
<tr>
<td>N. INITIAL WATER LEVEL</td>
<td>216.57 ft. below ground</td>
</tr>
<tr>
<td>O. INITIAL CHLORIDE</td>
<td>ppm</td>
</tr>
<tr>
<td>P. PUMPING TESTS: Reference point (R.P.) used:</td>
<td>Date and time of measurement 9/25/95 9:45 am</td>
</tr>
<tr>
<td>Q. DRILLER’S LOG:</td>
<td>See attached logs</td>
</tr>
<tr>
<td>Rock Description &amp; Remarks</td>
<td>Water Level ft.</td>
</tr>
<tr>
<td>Depth, ft.</td>
<td>Rock Description &amp; Remarks</td>
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<tr>
<td>0 to 15</td>
<td>reddish brown</td>
</tr>
<tr>
<td>15 to 28</td>
<td>blue rock - basalt</td>
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<tr>
<td>28 to 60</td>
<td>saprolite</td>
</tr>
<tr>
<td>60 to 245</td>
<td>basalt</td>
</tr>
<tr>
<td>Remarks:</td>
<td></td>
</tr>
</tbody>
</table>

Submitted by (print) Jennifer J. Kleveno
Title Masa Fujioka & Associates Associate
Signature [Signature]
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>Depth (ft)</th>
<th>USCS Graphic Log</th>
<th>Lithology Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5</td>
<td>CL</td>
<td>Surface condition: Reddish brown silty clay and gravel.</td>
</tr>
<tr>
<td>5-10</td>
<td>CL</td>
<td>Reddish brown silty clay to clayey silt, dry, loose.</td>
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<td>10-15</td>
<td>CL/</td>
<td>Blue-gray basalt; lessening clay in sample.</td>
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<tr>
<td></td>
<td>Rock</td>
<td>Gray basalt; (blue rock), fine grain, dense.</td>
</tr>
<tr>
<td>15-30</td>
<td>CL</td>
<td>Reddish brown silty clay, hard, dry, with blue-gray basalt fragments (saprolite).</td>
</tr>
<tr>
<td>30-40</td>
<td>Rock/</td>
<td>@ 40' Weathered basalt with rubble.</td>
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<tr>
<td></td>
<td>gravel</td>
<td>Highly vesicular basalt, rubble and cinder.</td>
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<tr>
<td>40-55</td>
<td>Rock</td>
<td>Gray basalt, vesicular, 10% olivine.</td>
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<tr>
<td>55-70</td>
<td></td>
<td>Increase in olivine to 20%.</td>
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<tr>
<td>70-80</td>
<td></td>
<td>Hammers to sand.</td>
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<tr>
<td>80-100</td>
<td></td>
<td>Decrease in olivine to 10%.</td>
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</tbody>
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**WELL SCHEMATIC**

- 8-inch diameter 5 feet high Locking well monument  
- 2 feet above ground surface  
- Centralizer  
- Cement Grout  
- 4.5-inch diameter PVC Schedule 80 well casing  
- 8-inch diameter borehole  
- 1.25-inch diameter PVC Schedule 80 riser pipe  
- Bentonite Grout

---

**BORING LOG AND WELL SCHEMATIC**

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

Lithologic Description

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<th>Depth (ft)</th>
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<tbody>
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<td>100</td>
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<tr>
<td>105</td>
<td>decrease in olivine.</td>
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</table>

WELL SCHEMATIC

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

BORING LOG

AND WELL SCHEMATIC

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

- **Rock:** Gray basalt, as above.
- **Groundwater:**

#### Boring Log

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Sample</th>
<th>USCS Graphic Log</th>
<th>USCS Classification</th>
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<td>315</td>
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</tbody>
</table>

**Total depth drilled:** 245 feet below grade.

---

**Masa Fujioka & Associates**  
Environmental - Geotechnical - Hydrogeological Consultants  
Maui Central Landfill  
Puunene, Maui, Hawaii  

---

**BORING LOG AND WELL SCHEMATIC**

**MFA - 5125-02**
A. STATE WELL NO. 5125-01  
WELL NAME: MP-1  
ISLAND: Maui

B. LOCATION: Central Maui Landfill  
TAX MAP KEY: 3-8-032

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  
DRILLER: David Pico

F. DATE OF WELL COMPLETION: Nov. 9, 1995  
DATE OF PUMP INSTALLATION: Sept. 29, 1995

G. GROUND ELEVATION (ma): 301.20 ft.

H. TOTAL DEPTH OF WELL BELOW GROUND: 318 ft.

I. HOLE SIZE: 6 inch dia. from 0 ft. to 325 ft. below ground

J. CASING INSTALLED:  
4.5 in. I.D. x Sch. 80 in. well solid section to 293 ft. below ground  
4.5 in. I.D. x Sch. 80 in. well perforated section to 313 ft. below ground  
Type of perforation: 4 Rows, 1/4" sp. Slot 0.020"

K. ANNULUS:  
Grouted from 0 ft. to 284 ft. below ground  
Gravel packed from 284 ft. to 318 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.: 10 HP Franklin Motor, 3/4 HP, 230V  
Depth of pump intake setting: 311 ft. below ground  
Depth of bottom of annulus: 310 ft. below ground

M. PROPOSED USE: Groundwater monitoring

N. INITIAL WATER LEVEL: 296.37 ft. below ground.

O. INITIAL CHLORIDE: — ppm

P. PUMPING TESTS: Reference point (R.P.) used: — which elevation is — ft.

Q. DRILLER'S LOG: See attached logs

R. REMARKS:

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

FOR OFFICIAL USE:  
Latitude: 20.5132  
Longitude: 156.2505  
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>Lithology and 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 silty clay dry, stiff.</td>
</tr>
<tr>
<td>10</td>
<td>CL/rock</td>
<td>Lessening clay in sample; Blue-gray basalt.</td>
</tr>
</tbody>
</table>
| 15         | Rock                | Gray basalt; (blue rock), aphanitic.  
| 20         |                     | <1% plagioclase crystals. |
| 25         | CL                  | Reddish brown silty clay, hard, dry, with blue-gray basalt fragments (saprolite). |
| 30         |                     | @ 49' Gray basalt with clinker (highly vesicular/fragmented rock). |
| 35         | Rock                | Blue-gray basalt, dense |
| 40         |                     | Red silty clay, hard, dry. |
| 45         |                     |                            |
| 50         |                     |                            |
| 55         |                     |                            |
| 60         |                     |                            |
| 65         |                     |                            |
| 70         |                     |                            |
| 75         |                     |                            |
| 80         |                     |                            |
| 85         |                     |                            |
| 90         |                     |                            |
| 95         |                     |                            |
| 100        |                     |                            |

---

**WELL SCHEMATIC**

- 8-inch diameter borehole
- 4.5-inch diameter PVC Schedule 80 well casing
- 1.25-inch diameter PVC Schedule 80 riser pipe
- Centralizer
- Cement Grout
- Ground surface
- 2 feet above ground surface
- Locking well monument

---

**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

- Red silty clay, hard, dry.
- Blue-gray basalt, hard, dense.
- Dark basalt, cuttings are powder.
- Gray basalt, hard, 2% olivine crystals.

WELL SCHEMATIC

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

Reduction in olivine crystals.

BORING LOG
AND WELL SCHEMATIC

MASA FUJIoka & ASSOCIATES
ENVIRONMENTAL · GEOTECHNICAL · HYDROGEOLOGICAL CONSULTANTS

5125-01

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

- Rock: Gray basalt, as above.
- Gray fine powder-like basalt cuttings; no chips.

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

BORING LOG

AND WELL SCHEMATIC

Masa Fujioka & Associates
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 (483' msl)

GROUND ELEVATION: 301.20' msl

Lithologic Description

Total depth of boring = 325 feet below ground surface.

Well Schematic

4-inch stainless steel submersible pump

313'

2" PVC

4.5-inch solid PVC

5-feet long

Drill cuttings 325'

MFA MASA FUJIOKA & ASSOCIATES
ENVIRONMENTAL • GEOTECHNICAL • HYDROGEOLOGICAL CONSULTANTS

BORING LOG
AND WELL SCHEMATIC

Maui Central Landfill
Puunene, Maui, Hawaii
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,

[Signature]

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

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  
Deputy

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.
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: ___________________________ 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
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
      Management, Solid Waste Division
      Firm/Name: Management, Solid Waste Division
      Contact Person: David Wissman
      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: Management, Solid Waste Division
      Contact Person: David Wissman
      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: Southeast section of Phase I/MI-l
   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
   [ ] Install New Pump
   [ ] Replace Pump
   [ ] Deepen
   [ ] Modify Pump
   [ ] Alter Location
   * Be sure to complete and submit well abandonment report upon completion of work.

(b) WELL TYPE:
   [ ] Dug
   [ ] Bored
   [ ] Drilled
   [ ] Radial
   [ ] Is this well a part of a battery of wells? Yes No
   (B 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
   [ ] Submersible
   [ ] Centrifugal
   Motor:
   [ ] Rotary
   [ ] Propeller
   [ ] Impulse
   [ ] Diesel
   [ ] Gas
   [ ] Electric, rated horsepower of _______ ___

5. PROPOSED USE:
   [ ] Municipal (including hotels, stores, etc.)
   [ ] Domestic (individual, noncommercial water sys.)
   [ ] Irrigation (crop)
   [ ] Urban
   [ ] Agriculture
   [ ] Industrial
   [ ] Other (explain)
   State Land Use District: [ ] Rural
   [ ] Conservation
   County Zoning (describe): [ ] Agricultural
   (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
   [ ] GIS
   [ ] 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 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 the approved permit shall not constitute a determination of correlative 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

County of Maui, Dept. of Public Works & Waste
Management, Solid Waste Division
Well Owner
Signature
Date

County of Maui, Dept. of Public Works & Waste
Management, Solid Waste Division
Landowner
Signature
Date

Contractor, Waterwell Drilling
Signature
Date

State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources

State Land Use District:
County Zoning:
Agricultural

Aquifer System Name
State Well No.

Longitude

Latitude

Date

For Official Use Only:

Date

Date

Date

Date

State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
Remarks, Explanations (cont'd): SEE WELL CONSTRUCTION PERMITS FOR DETAILS ON WELL CONSTRUCTION

**9. PROPOSED WELL SECTION**

<table>
<thead>
<tr>
<th>Component</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground Elevation</td>
<td>_____ ft., m.</td>
</tr>
<tr>
<td>Solid Casing</td>
<td></td>
</tr>
<tr>
<td>- Material</td>
<td></td>
</tr>
<tr>
<td>- Length</td>
<td></td>
</tr>
<tr>
<td>- Diameter</td>
<td></td>
</tr>
<tr>
<td>- Wall thickness</td>
<td></td>
</tr>
<tr>
<td>Rock Packing</td>
<td>_____ ft.</td>
</tr>
<tr>
<td>Cement Grout</td>
<td>_____ ft.</td>
</tr>
<tr>
<td>Hole Diameter</td>
<td>_____ in.</td>
</tr>
<tr>
<td>Total Depth</td>
<td>_____ ft.</td>
</tr>
<tr>
<td>Casing:</td>
<td></td>
</tr>
<tr>
<td>- Perforated</td>
<td></td>
</tr>
<tr>
<td>- Screen</td>
<td></td>
</tr>
<tr>
<td>- Material</td>
<td></td>
</tr>
<tr>
<td>- Length</td>
<td>_____ ft.</td>
</tr>
<tr>
<td>- Diameter</td>
<td>_____ in.</td>
</tr>
<tr>
<td>- Wall thickness</td>
<td>_____ in.</td>
</tr>
<tr>
<td>- Openings</td>
<td>_____ sq. ft.</td>
</tr>
<tr>
<td>Open Hole:</td>
<td></td>
</tr>
<tr>
<td>- Length</td>
<td>_____ ft.</td>
</tr>
<tr>
<td>- Diameter</td>
<td>_____ in.</td>
</tr>
</tbody>
</table>

*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, c, or d if all must be filled in)
   (a) WELL OWNER
      County of Maui, Dept. of 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
      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
      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/Mag-3
   Island: Maui
   Address: Central Maui Landfill, Pulehu Road
   Tax Map Key: (2) 3-8-03
   (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
   □ * Alter Location
   □ Redrill
   □ * Abandon/Seal
   □ 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: Six gallons per minute
   Motor:
   □ Deep Well Turbine
   □ Submersible
   □ Rotary
   □ Rotary-Displacement
   □ Rotary-Gear
   □ Propeller
   □ Reciprocating
   □ Impulse
   □ Electric, rated horsepower of

5. PROPOSED USE:
   □ Municipal (including hotels, stores, etc.)
   □ Domestic (individual, noncommercial water sys.)
   □ Irrigation (crop)
   □ Other (explain)
   State Land Use District:
   □ Urban
   □ Agriculture
   □ Rural
   □ Conservation
   County Zoning (describe)
   □ Industrial
   □ Military
   □ Other (explain)

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:
   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 below under remarks, explanations.

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 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 correlative 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

State or County:
Applicant Name:

Well Owner
Well Drilling

Landowner

Contractor

For Official Use Only: Longitude
Aquifer System Name
State Well No.
Remarks, Explanations (cont'd):

8. PROPOSED WELL SECTION

- Total Depth: _____ ft.
- Hole Diameter: _____ in.
- Rock Packing: _____ ft.
- Cement Grout: _____ ft.
- Solid Casing:
  - 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 (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 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
      Firm/Name: Management, Solid Waste Division
      Contact Person: David Wissmier
      Phone: 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 Wissmier
      Phone: 243-7843
      Address: 200 South High Street
               Wailuku, Maui, Hawaii 96793

   (c) CONTRACTOR
      David Pico
      Firm/Name: Waterwell Drilling
      Phone: 877-3419
      Contractor's C-57 License No.: ABC 2293
      Address: 342 Alu Road
               Wailuku, Maui Hawaii 96793

2. WELL LOCATION/NAME: North section of Phase III/MM-2
   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
       ☐ Rearrill
       ☐ Deepen
       ☐ Replace Pump
       ☐ Modify Pump
       ☐ Install New Pump
       ☐ * 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
   ☐ Submersible
   ☐ Centrifugal
   ☐ Rotary
   ☐ Rotary-Displacement
   ☐ Impulse
   ☐ Propeller
   Motor:
   ☐ Electric
   ☐ Diesel
   ☐ Gas
   ☐ Other (explain)
   (If more space is needed, continue below remarks, explanations.)

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

6. (a) PROPOSED AMOUNT OF WITHDRAWAL:
       60 ____________ gallons per day
       quarterly
       (b) METHOD OF FLOW MEASUREMENT:
           ☐ Flow-meter
           ☐ Open-pipe
           ☐ Orifice Plate
           ☐ Weir

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 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 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 correlative water rights and shall not guarantee the pump capacity or future use up to the permitted pump capacity.

WELL OWNER: County of Maui, Dept. of Public Works & Waste
Landowner: County of Maui, Dept. of Public Works & Waste
Contractor: Waterwell Drilling

For Official Use Only:
Date Received __________________ Date Accepted __________________
Field Checked By __________________

Signature __________________ Date __________________

State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources

Well Owner Management, Solid Waste Division
Landowner Management, Solid Waste Division
Contractor Waterwell Drilling

Signature __________________ Date __________________

County of Maui, Dept. of Public Works & Waste

Modern Island

Date __________________

Longitude __________________

Aquifer System Name __________________

State Well No. __________________

Www.water.hawaii.gov
Remarks, Explanations (cont'd): **SEE WELL CONSTRUCTION LIMITS FOR DETAILS ON WELL CONSTRUCTION**

9. PROPOSED WELL SECTION

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

Solid Casing:
Material
Length
Diameter
Wall thickness

Casing: [□] Perforated [□] Screen
Material
Length
Diameter
Wall thickness
Openings _________ eq. in./ft.

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.*
COMMISSION ON WATER RESOURCE MANAGEMENT

FROM: _______  DATE: 8/10  SUSPENSE DATE: _______

TO: INIT: TO: INIT: FOR: PLEASE:

R. LOUI  REGULATION BRANCH  E. SAKODA  APPROVAL  See Me
J. UWAIN  ( )  E. SAKODA  SIGNATURE  Review & Comment
F. CHING  ( )  D. HIGA  INFORMATION  Take Action
S. SUBIA  ( )  L. NAKAMA  Type Draft
K. YODA  ( )  C. ICE  Type Final
SURVEY BRANCH  _______  _______  R. JINNAI  File
  _______  _______  S. SWANSON  _______  _______  _______  _______  _______  _______
E. HIRANO  PLANING BRANCH  S. EDMUNDS  _______  _______  _______  Xerox ______ copies
G. BAUER  _______  _______  S. EDMUNDS  _______  _______  _______  _______  _______
R. HARDY  _______  _______  S. EDMUNDS  _______  _______  _______  _______  _______
N. FUJII  _______  _______  S. EDMUNDS  _______  _______  _______  _______  _______
M. OHYE  _______  _______  _______  _______  _______  _______  _______  _______
I. KUNIMURA  _______  _______  _______  _______  _______  _______  _______  _______

02/95
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

Jennifer J. Kleveno
Associate

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 (referred 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.

[Signature]
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: Landowner:

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

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>Well Description</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.
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).

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</thead>
<tbody>
<tr>
<td>01</td>
<td>305 ft.</td>
<td>4.5 in.</td>
<td>295 ft.</td>
<td>20 ft.</td>
<td>none</td>
<td>315 ft.</td>
</tr>
<tr>
<td>02</td>
<td>215 ft.</td>
<td>4.5 in.</td>
<td>205 ft.</td>
<td>20 ft.</td>
<td>none</td>
<td>225 ft.</td>
</tr>
<tr>
<td>03</td>
<td>240 ft.</td>
<td>4.5 in.</td>
<td>230 ft.</td>
<td>20 ft.</td>
<td>none</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.
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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.
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>
<th>Well No.</th>
<th>Application Type</th>
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<td>Wailuku-Landfill Monitor Wells</td>
<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: LOI N. KAJIRAWA
Phone: 586-4294

Signed: LOI N. KAJIRAWA
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.

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</tr>
</tbody>
</table>

Should you have any questions, please contact the Commission on Water Resource
Management staff at 587-0231.

Response:

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

Contact Person: William Devick
Phone: 587-0231
Signed: William Devick
Date: JUN 10 1995
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 Management, Solid Waste Division
   Firm/Name: ____________________________
   Contact Person: ________________________
   Address: ________________________________
   City, State, Zip: _________________________
   Phone: ____________________________

   (b) LANDOWNER: County of Maui, Dept. of Public Works & Waste Management, Solid Waste Division
   Firm/Name: ____________________________
   Contact Person: ________________________
   Address: ________________________________
   City, State, Zip: _________________________
   Phone: ____________________________

   (c) CONTRACTOR: David Pico
   Firm/Name: Waterwell Drilling
   Contact Person: ________________________
   Address: ________________________________
   City, State, Zip: _________________________
   Phone: ____________________________

2. WELL LOCATION/NAMES:
   - Southeast section of Phase I/WG-1
   - Island: Maui
   - Address: Central Maui Landfill, Pulama Road
   - Tax Map Key: (2)3-8-03:19

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.

4. PROPOSED PUMP INFORMATION:
   - Rated Pump Capacity: N/A gallons per minute
   - Motor: ____________________________
   - Rating: ____________________________

5. PROPOSED USE:
   - Municipal (including hotels, stores, etc.):________________________
   - Domestic (individual, noncommercial water systems):________________________
   - Irrigation (crop):________________________
   - State Land Use District: ____________________________
   - County Zoning (describe): ____________________________

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

7. PENDING ACTIONS:
   - Application, Call the Waterwell Division at 808-234-2103
   - For more information, call the Division at 808-234-2103

8. REMARKS, EXPLANATIONS:
   - State of Hawaii, DHI, Ch. 11-58.1, Sec. 16 as well as Fed. Reg. Subtitle "D"
   - Bag, R. 148, 94-5000
   - Cfr 258.54
   - (For 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 shall submit to the Commission a well completion report, well abandonment report, or both, within 30 days after completion of the permitted work. The applicant shall also submit 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 correlative water rights and shall not guarantee the pump capacity or future use 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.

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 included in the well completion/well abandonment reports.
COMMISSION ON WATER RESOURCE MANAGEMENT

FROM: E. Hirano

DATE: 6/30/95

TO: INIT:

R. LOUI
J. UWAINA
F. CHING
S. SUBIA
K. YODA

SURVEY BRANCH

REGULATION BRANCH

E. SAKODA
D. HIGA
L. NAKAMA
C. ICE
R. JINNAI
S. SWANSON

APPROVAL

SIGNATURE

INFORMATION

PLEASE:

See Me
Review & Comment
Take Action
Type Draft
Type Final
File
Xerox ______ copies

PLANING BRANCH

S. EDMUNDS
L. MIZUNO

02/95
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>
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</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: Elizabeth K. Kasten  
Phone: 243-7835

Signed:  
Ellen H. Louie for David Craddick  
Date: 6/29/95
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 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 587-6225.

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

   (b) LANDOWNER  
   Firm/Name: Solid Waste Division  
   Contact Person: David Wiegman  
   Address: 200 South High Street  
   Wailuku, Maui, Hawaii 96793

   (c) CONTRACTOR  
   Firm/Name: Waterwell Drilling  
   Address: 343 Alu Road  
   Wailuku, Maui Hawaii 96793

2. WELL LOCATION/NAME: Southeast section of Phase I/Block-1  
   Island: Maui  
   Address: Central Maui Landfill, Polehu Road  
   Tax Map Key: (2)3-8-03:19
   (Attach a USGS map, scale 1" = 2007, 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]  
   [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]  
   [Pedal]

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

5. PROPOSED USE:  
   [Municipal (including hotels, stores, etc.)]  
   [Military]  
   [Domestic (individual, noncommercial water syst.)]  
   [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]  
   [SMA]  
   [ES]  
   [EA]  
   [NONE]  
   [Other (explain)]

8. REMARKS, EXPLANATION:
   5. Monitoring Well  
   7. Regulation requirements for State of Hawaii, D.H., 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 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 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 shall not constitute a determination of competitive water rights and shall not guarantee the pump capacity or future use up to the permitted pump capacity.

Well Owner  
Landowner  
Contractor  

[Signature]  
[Signature]  
[Signature]

Date  
Date  
Date

For Official Use Only:

Date Received
Date Accepted
Field Checked By

Longitude  
Aquifer System Name  
State Well No.

Latitude
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. msl
- Elevation at top of casing: 308 ft. msl
- 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: □ Perforated □ Screen
  - Material: PVC
  - Length: 20 ft.
  - Diameter: 4.5 in
  - Wall thickness: SCH 80
  - Openings: 22 sq. in./L.F.

*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.*
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.

<table>
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<tr>
<td>Maui</td>
<td>Wailuku-Landfill Monitor Wells</td>
<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.

Enc.

Response:

X 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. Manriq
Signed: Luis A. Manriq
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**.

<table>
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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

Cl: ss
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. 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.

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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 __Jul 10, 1995__.

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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.  

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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: __________________________  
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,

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***** DOLLARS

Bank of Hawaii

Well permit application fee

For Job #94128-001

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<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</td>
<td>SRC/OBJ COST CTR PROJECT PH ACT</td>
<td>AMOUNT</td>
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<tr>
<td>TOTAL</td>
<td></td>
<td>$75.00</td>
</tr>
</tbody>
</table>

**REMARKS:**
LINE (1) Wailuku-PW Monitor Well (No. 5125-01, 02, 03)
LINE (2)
LINE (3)
LINE (4)
TO State of Hawaii  
Commission on Water Resource Management  
Department of Land and Natural Resources  
P. O. Box 621  
Honolulu, HI 96809

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

<table>
<thead>
<tr>
<th>COPIES</th>
<th>DATE</th>
<th>NO.</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5/19/95</td>
<td></td>
<td>Application for Permit Well Construction-Southeast section of Phase I/MW-1</td>
</tr>
<tr>
<td>1</td>
<td>5/19/95</td>
<td></td>
<td>Application for Permit Well Construction-Northwest section of Phase II/MW-3</td>
</tr>
<tr>
<td>1</td>
<td>5/19/95</td>
<td></td>
<td>Application for Permit Well Construction-North section of Phase III/MW-2</td>
</tr>
<tr>
<td>1</td>
<td>5/19/95</td>
<td></td>
<td>Tax Map (location of Groundwater Monitoring Well)</td>
</tr>
<tr>
<td>1</td>
<td>5/19/95</td>
<td></td>
<td>USGS Map PAIA Quadrangle</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: print name, signature

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

Well Construction or Pump Installation

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

   (c) CONTRACTOR David Pico
       Firm/Name: Waterwell Drilling
       Address: 333 Aiu Road
       Wailuku, Maui Hawaii 96793

2. WELL LOCATION/NAME: Southeast section of Phase I (NW-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
       [ ] * Alter Location [ ] Redrill [ ] 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 [ ] Submersible [ ] Centrifugal
   [ ] Rotary [ ] Rotary-Displacement [ ] Rotary-Gear
   Motor: [ ] Propeller [ ] Reciprocating [ ] Impulse
   [ ] 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
       County Zoning (describe): [ ] Agricultural
       (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
      (If more space is needed, continue on back)
      State of Hawaii, DOH, Ch. 11-58.1, Sec. 16 as well as Fed. Reg. Subtitle "P"
      CFR 258.54
      (If more space is needed, continue on back)

For Official Use Only:
Date Received
Date Accepted
Field Checked By
Date

State Well No.
Aquifer System Name
Longitude
Latitude

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 water rights and shall not guarantee the pump capacity or future use up to the permitted pump capacity.
All a borehole to approximately 315 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: 308 ft., msl.
Ground Elevation: 305 ft., msl*

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:
- □ 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 (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.
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources

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
      Phone: 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
      Phone: 243-7843
      Address: 200 South High Street
      Wailuku, Maui, Hawaii 96793

   (c) CONTRACTOR: David Pico
      Firm/Name: Waterwell Drilling
      Phone: 877-3419
      Address: 343 Alu Road
      Wailuku, Maui Hawaii 96793
      Contractor's C-57 License No.: ABC 2291

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

   (Attach a USGS map, scale 1"=1000, 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
   □ After Location
   □ Redrill
   □ Replace Pump
   □ * Abandon/Seal
   □ Be sure to complete and submit well abandonment report upon completion of work.

   (b) WELL TYPE:
   □ Dug
   □ Bored
   □ Driven
   □ Shelled
   □ Radial
   □ Is this well a part of a battery of wells? □ Yes □ No
   □ Other
   (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
   □ Propeller
   □ Reciprocating
   □ Impulse
   □ Motor:
   □ Diesel
   □ Gas
   □ Electric, rated horsepower of

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

   (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:
   N/A

   (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 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 corrective water rights and shall not guarantee well pump capacity or future use up to the permitted pump capacity.

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

Signature:

Date: 5/12/95

For Official Use Only:
Date Received
Date Accepted
Field Checked By

Longitude

Aquifer System Name
State Well No.
ill 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.

9. PROPOSED WELL SECTION

- **Ground Elevation**: 215 ft, mol
- **Cement Grout**: 198 ft
- **Bentonite Seal**: 2 ft
- **Sand Stock Packing**: 25 ft
- **Hole Diameter**: 8 in
- **Total Depth**: 225 ft
- **Solid Casing**: PVC
  - **Material**: PVC
  - **Length**: 205 ft
  - **Diameter**: 4.5 in
  - **Wall thickness**: SCH 80
- **Open Hole**: None

Approximate elevation at time of filing application. Ground elevation above mean sea level (mol) 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]

In order to be considered complete, this application must be accompanied by a non-refundable filing fee of $25.00 payable to the Department of Land and Natural Resources. The Commission may not accept incomplete applications. For assistance, call the Regulation Branch at 808-668-2225.

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: David Wissmar
      Contact Person: 243-7843
      Address: 200 South High Street
      Wailuku, Maui, Hawaii 96793
   (b) LANDOWNER
      County of Maui, Dept. of Public Works & Waste
      Firm/Name: David Wissmar
      Contact Person: 243-7843
      Address: 200 South High Street
      Wailuku, Maui, Hawaii 96793
   (c) CONTRACTOR
      David Pico
      Firm/Name: 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: Northwest section of Phase II/IV-3
   Address: Central Maui Landfill, Pulehu Road
   Island: Maui
   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
      □ Redrill
      □ Install New Pump
      □ Modify Existing Well
      □ Replace Pump
      □ Deepen
      □ * Abandon/Seal
      □ Modify Pump
      * Be sure to complete and submit well abandonment report upon completion of work.
   (b) WELL TYPE:
      □ Drilled
      □ Bored
      □ Drive
      □ Radial
      □ Open
      □ Drill
      □ Bored
      □ Drive
      □ 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
      □ Submersible
      □ Centrifugal
      □ Rotary
      □ Rotary-Displacement
      □ Impulse
   Motor:
      □ Propeller
      □ Impulse
      □ Electric, rated horsepower of
      □ Diesel
      □ Gas
      □ No
      □ N/A

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
      □ 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
      □ Office Plate
      □ Weir

7. PENDING ACTIONS:
   □ COFA
   □ MPA
   □ USE
   □ 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 is granted within two (2) years of the approval date. In addition, the contractor shall submit to the Commission a well completion report, an 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 use up to the permitted pump capacity.

For Official Use Only:
Date Accepted
Field Checked By
Date
Longitude
State Well No.
Aquifer System Name

For Official Use Only:
Date Received
Signature
Date
Signature
Date
Signature
Date
Drill a borehole to approximately 250 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:** 240 ft., msl
- **Cement Grout:** 223 ft.
- **Bentonite Seal:** 2 ft.
- **Sand Pack:** 25 ft.
- **Hole Diameter:** 8 in.
- **Total Depth:** 250 ft.

**Casing:**
- **Material:** PVC
- **Length:** 230 ft.
- **Diameter:** 4.5 in.
- **Wall thickness:** SCH 80
- **Perforated:** Yes
- **Screen:** No
- **Openings:** 22 sq. in./L.F.
- **Length:** None
- **Diameter:** 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.*