CHECKLIST

Type of Permit: XWell 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 Fujimoto & Assoc. TMK 3-8-3-19

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

Copies Sent for Review Sent Comments Recd
DoH/ Drink Water JUN 2 3 1995
Wastewater JUN 2 3 1995
Hist. Preserv JUN 2 3 1995
Aquat Res JUN 2 3 1995
OHA JUN 2 3 1995
DHHL JUN 2 3 1995
Honolulu BWS JUN 2 3 1995
Maui DoW JUN 2 3 1995
Kauai DoW
Hawaii DoW
PW
SCLDF
Com: __________

Bulletin 15 Jun for July 95

<table>
<thead>
<tr>
<th>MW</th>
<th>1</th>
<th>305</th>
<th>315</th>
<th>d</th>
</tr>
</thead>
</table>
2   | 215 | 225 |
2   | 240 | 250 |

Submittal to Appl __________
CWRM _Appr _Deny __________
Permit/Notice to Appl __________
WAILUKU — LANDFILL MONITOR WELLS
(5125—01, 02, 03 M)

ATTACHMENT A
TO: Ron Boyle, Jen 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
228 1990

Ron Boyle 523 8874
f: 523 8950

Return Fax: 587-0219
Return Post: P.O.Box 621, Honolulu 96809
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources

FAX: Transmitting 5 pages, including this one; call 587-0251 with any reception problems.

TO: Jeni Goethals
FROM: Charley Ice

Date: 07 Mar 01

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

Please let us know if you need additional information.

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

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

RECOMMENDATION:

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

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

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

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

General Recording Requirements

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

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

Step-Drawdown Test

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

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

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

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

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

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

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

Long-Term Continuous Test

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

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

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

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

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

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

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

AQUIFER TEST DATA

County: ____________________________  Observation well no.: ____________________________

Location: __________________________  Pumped well no.: ____________________________

Average Q: _______________ gpm  Distance between Observation & Pumped Well _______ ft.

<table>
<thead>
<tr>
<th>Date</th>
<th>Hour</th>
<th>t (min)</th>
<th>Depth to water (ft)</th>
<th>s (unadjusted) (ft)</th>
<th>Adjustment as (ft)</th>
<th>Q (gpm)</th>
<th>Cl'</th>
<th>Temp. °F or °C</th>
<th>Remarks</th>
</tr>
</thead>
</table>


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**

<table>
<thead>
<tr>
<th>COPIES</th>
<th>DATE</th>
<th>NO.</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>1</td>
<td>12/1/95</td>
<td>1 pg</td>
<td>Well Completion Report-Well No. 5125-01, Well Name-MW-1, Island-Maui</td>
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<td>1</td>
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<td>4 pgs</td>
<td>Boring Log and Well Schematic: MW-1</td>
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<tr>
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<td>1 pg</td>
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<td>3 pgs</td>
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<tr>
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<td>12/1/95</td>
<td>1 pg</td>
<td>Well Completion Report-Well No. 5125-03, Well Name-MW-3, Island Maui</td>
</tr>
<tr>
<td>1</td>
<td>12/1/95</td>
<td>3 pgs</td>
<td>Boring Log and Well Schematic: MW-3</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
- Prints returned after loan to us

**REMARKS**

______________________________________________________________________________

COPY TO County of Maui
Attn: Mr. Dave Wissmar

SIGNED: Jennifer J. Kleveno, Associate

If enclosures are not as noted, kindly notify us at once.
A. STATE WELL NO. 5125-03
WELL NAME
B. LOCATION
Central Maui Sandfill
C. WELL OWNER
County of Maui, Solid Waste Division
D. DRILLING OR PUMP INSTALLATION CONTRACTOR
Air Hammer
E. TYPE OF RIG
DRILLER
F. DATE OF WELL COMPLETION
Nov. 9, 1995
DATE OF PUMP INSTALLATION
Sept. 27, 1995
G. GROUND ELEVATION (m.a.s.l.)
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
8 inch dia. from 0 ft. to 260 ft. below ground
J. CASING INSTALLED:
4.5 in. I.D. x 40 ft. wall solid section to 238 ft. below ground
4.5 in. I.D. x 20 ft. wall perforated section to 253 ft. below ground
K. ANNULUS:
Grouted from 0 ft. to 229 ft. below ground
Gravel packed from 229 ft. to 258 ft. below ground
L. PERMANENT PUMP INSTALLATION:
Pump type, make, serial No.: Stainless steel submersible Grundfos Capacity 6 gpm
Motor type, H.P., voltage, R.P.M.: 110 V Franklin Motor, 1/2 H.P., 2900
Depth of pump intake setting below ground: 253 ft. below ground
Depth of bottom of airline below which elevation is 21.81 ft.
M. PROPOSED USE
Groundwater monitoring
N. INITIAL WATER LEVEL
238.48 ft. below ground.
O. INITIAL CHLORIDE
p.p.m.
O. DATE AND TIME OF SAMPLING
8/10/95, 10:10 a.m.
P. PUMPING TESTS: Reference point (R.P.) used:

Q. DRILLER'S LOG:

<table>
<thead>
<tr>
<th>Depth, ft.</th>
<th>Rock Description &amp; Remarks</th>
<th>Water Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 20</td>
<td>sand, silty clay</td>
<td></td>
</tr>
<tr>
<td>20 to 40</td>
<td>blue rock</td>
<td></td>
</tr>
<tr>
<td>40 to 60</td>
<td>sapphireite</td>
<td></td>
</tr>
<tr>
<td>60 to 100</td>
<td>rock &amp; gravel</td>
<td></td>
</tr>
<tr>
<td>100 to 150</td>
<td>gray basalt</td>
<td></td>
</tr>
<tr>
<td>150 to 200</td>
<td>soft rock</td>
<td></td>
</tr>
<tr>
<td>200 to 250</td>
<td>gray basalt</td>
<td></td>
</tr>
</tbody>
</table>

REMARKS:

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

FOR DRILLER'S USE
Job Name
Job No.

FOR OFFICIAL USE
Latitude 20.51 N
Longitude 156.25 W
Well No. 5125-03
BORING/WELL: MW-3

DRILLING DATES: August 7, 1995-August 9, 1995
SAMPLING METHOD: Grab sample of drill cuttings
DRILLING METHOD: Air Hammer
INITIAL WATER LEVEL: 238.48 feet below grade (2.71' msl)
GROUND ELEVATION: 241.19' msl

**Lithologic Description**

Surface condition: Reddish brown silty clay.
Reddish brown silty clay, dry, hard.
Lessening clay in sample.
Blue-gray basalt.

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

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

Weathered reddish gray basalt with rubble.

Vesicular basalt, 2% olivine, <1% augite crystals.
Grades from reddish gray to gray.

Gray basalt, 10% olivine.

---

MFA MASA FUJIOKA & ASSOCIATES
ENVIRONMENTAL - GEOTECHNICAL - HYDROGEOLOGICAL CONSULTANTS

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

Lithologic Description

100
105
110
115
120
125
130
135
140
145
150
155
160
165
170
175
180
185
190
195
200

Rock
decrease in olivine.

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

Medium hard basalt, less vesicular.
Olivine crystals to 1-3 %.

Soft basalt, decrease in olivine to <1%, hammers to powder.
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>Lithology Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>200-205</td>
<td>Rock: Gray basalt, medium hard.</td>
</tr>
<tr>
<td>210-215</td>
<td>Gray basalt, with plagioclase crystals.</td>
</tr>
<tr>
<td>220-225</td>
<td>Groundwater</td>
</tr>
<tr>
<td>230-235</td>
<td></td>
</tr>
<tr>
<td>240-245</td>
<td></td>
</tr>
<tr>
<td>250-255</td>
<td></td>
</tr>
<tr>
<td>260-265</td>
<td>Total depth drilled 260 feet below grade.</td>
</tr>
</tbody>
</table>

BORING LOG

AND WELL SCHEMATIC

MASA FUJIOKA & ASSOCIATES
ENVIRONMENTAL • GEOTECHNICAL • HYDROGEOLOGICAL CONSULTANTS

5125-03

Maui 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 548-7243, Hydrology, Geology Section for Assistance.

A. STATE WELL NO. 5125-02 WELL NAME Mo-2
B. LOCATION Central Maui Landfill TAX MAP KEY 3-8-03-2
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 Oct. 4, 1995

G. GROUND ELEVATION (ma) 221.27 ft.
Top of Drilling Platform __________ ft.
Height of drilling platform above ground surface __________ ft. Pumping EL = 180.00

H. TOTAL DEPTH OF WELL BELOW GROUND 238 ft.

I. HOLE SIZE:

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Method</th>
<th>Size (inch)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 to 15</td>
<td>Rock</td>
<td>Silty clay</td>
</tr>
<tr>
<td>15 to 28</td>
<td>Soil</td>
<td>Blue rock</td>
</tr>
<tr>
<td>28 to 40</td>
<td>Soil</td>
<td>Saprolite</td>
</tr>
<tr>
<td>40 to 60</td>
<td>Rock</td>
<td>Rock &amp; gravel</td>
</tr>
<tr>
<td>60 to 245</td>
<td>Rock</td>
<td>Basalt</td>
</tr>
</tbody>
</table>

J. CASING INSTALLED:

- 1-1/2" Schedule 40
- 2-1/4" Schedule 80

K. ANNULUS:

- Grouted from 0 ft. to 209.8 ft. below ground
- Gravel packed from 209.8 ft. to 238 ft. below ground

L. PERMANENT PUMP INSTALLATION:

- Pump type, make, serial No. 4" Stainless steel submersible Grundfos Capacity 6 epm
- Motor type, H.P., voltage, F.P.M. 10HP Franklin Motor, 240 Volts
- Depth of pump intake setting 233 ft. below ground
- Depth of bottom of airline 211.7 ft. below ground

M. PROPOSED USE

Groundwater monitoring

N. INITIAL WATER LEVEL 216.57 ft. below ground.
O. INITIAL CHLORIDE ppm.

P. PUMPING TESTS: Reference point (R.P.) used:

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Start water level</th>
<th>End water level</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/25/95</td>
<td>9:45 am</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q. DRILLER'S LOG: See attached logs

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Rock Description &amp; Remarks</th>
<th>Water Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 15</td>
<td>Rockish brown</td>
<td>0</td>
</tr>
<tr>
<td>15 to 28</td>
<td>Silty clay</td>
<td>15 to 28</td>
</tr>
<tr>
<td>28 to 40</td>
<td>Blue rock</td>
<td>28 to 40</td>
</tr>
<tr>
<td>40 to 60</td>
<td>Saprolite</td>
<td>40 to 60</td>
</tr>
<tr>
<td>60 to 245</td>
<td>Rock &amp; gravel</td>
<td>60 to 245</td>
</tr>
</tbody>
</table>

REMARKS:

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

FOR DRILLER'S USE

Job Name

Job No.

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>Lithology</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5</td>
<td>CL</td>
<td>Surface condition: Reddish brown silty clay and gravel. Reddish brown silty clay to clayey silt, dry, loose.</td>
</tr>
<tr>
<td>10-15</td>
<td>CL/Rock</td>
<td>Blue-gray basalt; lessening clay in sample.</td>
</tr>
<tr>
<td>15-20</td>
<td>Rock</td>
<td>Gray basalt; (blue rock), fine grain, dense.</td>
</tr>
<tr>
<td>20-35</td>
<td>CL</td>
<td>Reddish brown silty clay, hard, dry, with blue-gray basalt fragments (saprolite).</td>
</tr>
<tr>
<td>35-40</td>
<td>Rock/gravel</td>
<td>@ 40' Weathered basalt with rubble. Highly vesicular basalt, rubble and cinder.</td>
</tr>
<tr>
<td>40-50</td>
<td>Rock</td>
<td>Gray basalt, vesicular, 10% olivine. Increase in olivine to 20%. Hammers to sand.</td>
</tr>
<tr>
<td>50-100</td>
<td>Rock</td>
<td>Decrease in olivine to 10%.</td>
</tr>
</tbody>
</table>

**WELL SCHEMATIC**

- 8-inch diameter 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

**MFAMA FUJIOKA & ASSOCIATES**

Environmental, Geotechnical, Hydrogeological Consultants

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

- Decrease in olivine.
- Increase in plagioclase, decrease in olivine to 1%.

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

---

### Lithologic Description

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>200-215</td>
<td>Gray basalt, as above.</td>
</tr>
<tr>
<td>220-245</td>
<td>Groundwater</td>
</tr>
</tbody>
</table>

Total depth drilled 245 feet below grade.

---

**WELL SCHEMATIC**

- Bentonite seal (207 feet)
- 4.5-inch PVC schedule 80 well screen 0.020 slots
- 4-inch stainless steel submersible pump
- 2" PVC
- 4.5-inch solid PVC 5-feet long
- Drill cuttings

---

**BORING LOG AND WELL SCHEMATIC**

Maui Central Landfill
Puunene, Maui, Hawaii
**WELL COMPLETION REPORT**

**A. STATE WELL NO.** 5125-01  
**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  
**G. GROUND ELEVATION (mal)** 30.20 ft.  
**H. TOTAL DEPTH OF WELL BELOW GROUND** 318 ft.  
**I. HOLE SIZE** 8 inch dia. from 0 ft. to 325 ft. below ground  
**J. CASING INSTALLED** 4.5 in. dia. (I.D.) x Sch. 40, well solid section to 293 ft. below ground  
**K. ANNULUS** Grouted from 0 ft. to 284 ft. below ground  
**L. PERMANENT PUMP INSTALLATION**  
- **Pump type, make, serial No.** 4" Stainless steel submersible Grundfos  
- **Motor type, H.P., voltage, r.p.m.** 1HP Franklin Motor, 3/4 HP, 2950 rpm  
- **Depth of pump intake setting** 318 ft. below ground  
- **Depth of bottom of airliner** 318 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:  
- **Date and time of measurement** 9/29/95 8:15 am  
- **Date and time of sampling** /  
**Q. DRILLER'S LOG** See attached logs  
**R. REMARKS:**

Submitted by (print) Jennifer J. Kleveno  
Title: Mass Fujioka & Associates  
Associate

FOR OFFICIAL USE  
Latitude 20 51.32  
Longitude 156 25.05  
Well No. 5125-01
BORING/WELL: MW-1

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

SAMPLING METHOD: Grab sample of drill cuttings

DRILLING METHOD: Air Hammer

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

GROUND ELEVATION: 301.20' msl

Lithologic Description

Surface condition: Red clay and gravel.
Red silty clay dry, stiff.

Lessening clay in sample;
Blue-gray basalt.

Gray basalt; (blue rock), aphanitic.
<1% plagioclase crystals.

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

@ 49' Gray basalt with clinker (highly vesicular/fragmented rock).

Blue-gray basalt, dense

Red silty clay, hard, dry.
BORING/WELL: MW-1

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

SAMPLING METHOD: Grab sample of drill cuttings

DRILLING METHOD: Air Hammer

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

GROUND ELEVATION: 301.20' msl

Lithologic Description

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Lithology</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-105</td>
<td>CL</td>
<td>Red silty clay, hard, dry.</td>
</tr>
<tr>
<td>110-115</td>
<td>Rock</td>
<td>Blue-gray basalt, hard, dense.</td>
</tr>
<tr>
<td>120-125</td>
<td></td>
<td>Dark basalt, cuttings are powder.</td>
</tr>
<tr>
<td>130-135</td>
<td></td>
<td>Gray basalt, hard, 2% olivine crystals.</td>
</tr>
<tr>
<td>140-145</td>
<td></td>
<td>Reduction in olivine crystals.</td>
</tr>
</tbody>
</table>

WELL SCHEMATIC

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

BORING LOG AND WELL SCHEMATIC

MAUI CENTRAL LANDFILL
Puunene, Maui, Hawaii

MAFA MASA FUJIOKA & ASSOCIATES
ENVIROMENTAL - GEOTECHNICAL - HYDROGEOLOGICAL CONSULTANTS
**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

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Lithologic Description</th>
<th>WELL SCHEMATIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>Rock</td>
<td></td>
</tr>
<tr>
<td>205</td>
<td></td>
<td></td>
</tr>
<tr>
<td>210</td>
<td></td>
<td></td>
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<tr>
<td>215</td>
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<tr>
<td>220</td>
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<td>225</td>
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<tr>
<td>230</td>
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<td>235</td>
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<td>240</td>
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<td>245</td>
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<td>250</td>
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<td>275</td>
<td></td>
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<tr>
<td>280</td>
<td></td>
<td></td>
</tr>
<tr>
<td>285</td>
<td></td>
<td></td>
</tr>
<tr>
<td>290</td>
<td>Groundwater</td>
<td></td>
</tr>
<tr>
<td>295</td>
<td></td>
<td></td>
</tr>
<tr>
<td>300</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Gray basalt, as above.

Gray fine powder-like basalt cuttings; no chips.

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**BORING LOG**  
**AND WELL SCHEMATIC**  
Maui Central Landfill MW-1  
Puunene, Maui, Hawaii
BOARING/WELL: MW-1

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

SAMPLING METHOD: Grab sample of drill cuttings

DRILLING METHOD: Air Hammer

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

GROUND ELEVATION: 301.20' msl

Lithologic Description

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

Dear Mr. Jencks:

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

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

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

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

Aloha,

Michael D. Wilson

Enclosures
State of Hawaii  
Department of Land and Natural Resources  
COMMISSION ON WATER RESOURCES MANAGEMENT  
Honolulu, Hawaii  
DEC - 1995

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

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

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

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

LANDOWNER: Same

DESCRIPTION:

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

Dimensions:

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

ISSUES/ANALYSIS:

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

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

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

RECOMMENDATION:

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

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

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

Dear Mr. Jencks:

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

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

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

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

Aloha,

MICHAEL D. WILSON

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

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

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).

[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
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
     - Name: David Wismann
     - Contact Person: David Wismann
     - Address: 200 South High Street
     - Wallula, Maui, Hawaii 96793
   - **(b) LANDOWNER**
     - County of Maui, Dept. of Public Works & Waste
     - Name: David Wismann
     - Contact Person: David Wismann
     - Address: 200 South High Street
     - Wallula, Maui, Hawaii 96793
   - **(c) CONTRACTOR**
     - David Pico
     - Name: Waterwell Drilling
     - Address: 343 Alu Road
     - Wallula, Maui, Hawaii 96793

2. **WELL LOCATION/NAME:** Southeast section of Phase I/MI-1
   - **Island:** Maui
   - **Address:** Central Maui Landfill, Pulehu Road
   - **Tax Map Key:** (2) 3-8-03:19
   - **Ph:** 877-3419
   - **Contractor's C-87 License No:** ABC 2291

3. **PROPOSED WORK:**
   - **(a)** Drill New Well
   - **(b) WELL TYPE:**
     - **(b) WELL TYPE:**
     - **(b) WELL TYPE:**

4. **PROPOSED PUMP INFORMATION:**
   - **Rated Pump Capacity:** Six gallons per minute
   - **Pump Type:**
     - Deep Well Turbine
     - Submersible
     - Centrifugal
   - **Motor:**
     - Rotary
     - Generator
     - Impulse
   - **Propulsion:**
     - Propeller
     - Deep Well
     - Replace Pump
   - **Abandon/Seal:**
     - Abandon/Seal
     - Modify Well
     - Deepen
   - **Radial:**
     - Radial
     - Rotary-Displacement
   - **Location:**
     - Alter Location
     - Modify Existing Well
     - Drill New Well

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

6. **(a) PROPOSED AMOUNT OF WITHDRAWAL:**
   - 60 gallons per day/quarterly

7. **METHOD OF FLOW MEASUREMENT:**
   - Flow-meter
   - Open-pipe
   - Office Plate
   - Weir

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

**NOTE:** Signing below indicates that the applicant understands that, if the permit is granted, it is to be completed within two (2) years of the approval date. In addition, the contractor shall submit a completion report, well abandonment report, or both, within 30 days after completion date of the permit 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 By:**
- **Date:**
- **Longitude:**
- **Aquifer System Name:**
- **State Well No.:**
Remarks, Explanations (cont'd):

SEE WELL CONSTRUCTION PERMITS FOR DETAILS ON WELL CONSTRUCTION

9. PROPOSED WELL SECTION

- Elevation at top of casing:
  - ft., m.

- Ground Elevation: _____ ft., m.

- Cement Grout: _____ ft.

- Rock Packing: _____ ft.

- Hole Diameter: _____ in.

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

- Total Depth: _____ ft.

- Casing: ☐ Perforated ☐ Screen
  - Material
  - Length: _____ ft.
  - Diameter: _____ in.
  - Wall thickness: _____ in.
  - Openings: _____ sq. in./L.F.

- Open Hole:
  - Length: _____ ft.
  - Diameter: _____ in.

---

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

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

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

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

2. WELL LOCATION/NAME: Northwest section of Phase II/MP-3
   Island: Maui
   Address: Central Maui Landfill, Pulehu Road
   Wailuku, Maui Hawaii 96793
   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  
   - Redrill  
   - Recharge  
   - 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
   Pump Type:  
   - Deep Well Turbine  
   - Submersible  
   - Centrifugal  
   - Rotary  
   - Rotary-Displacement  
   - Impulse  
   Motor:  
   - Propeller  
   - Reciprocating  
   - Gas  
   - Diesel  
   - Electric, rated horsepower of

5. PROPOSED USE:  
   - Municipal (Including hotels, stores, etc.)  
   - Domestic (Individual, noncommercial water use)  
   - Industrial  
   - Irrigation (crop)  
   - Other (explain)  
   State Land Use District:  
   - Urban  
   - Agriculture  
   - Rural  
   - Conservation  
   County Zoning (describe):  
   - Agricultural

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

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

8. REMARKS, EXPLANATIONS:  
   - Monitoring well 7. Regulation requirements for State and Federal quarterly ground water monitoring. Maximum withdrawal is 60 gallons every 3 months, water will be pumped for sampling only.

   (If more space is needed, puddle on back)
Remarks, Explanations (cont'd): 

8. PROPOSED WELL SECTION

- Elevation at top of casing: ______ ft., mel.
- Ground Elevation: ______ ft., mel.
- Cement Grout: ______ ft.
- Rock Packing: ______ ft.
- Hole Diameter: ______ in.
- Total Depth: ______ ft.
- Casing: □ Perforated □ Screen
  - Material
  - Length
  - Diameter
  - Wall thickness
  - Openings ______ sq. in./ft.
- Open Hole:
  - Length
  - Diameter

*Approximate elevation at time of filing application. Ground elevation above mean sea level (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

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

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

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

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 [ ] Alter Location
         [ ] Modify Existing Well [ ] Redrill
         [ ] Install New Pump [ ] Replace 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

   Pump Type:
   [ ] Deep Well Turbine [ ] Rotary
   [ ] Submersible [ ] Propeller
   [ ] Centrifugal [ ] Reciprocating
   [ ] Motor:
   [ ] Diesel
   [ ] Gas
   [ ] Electric, rated horsepower of

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

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

8. REMARKS, EXPLANATIONS:
   5. Monitored 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 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 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 cumulative water rights and that shall not guarantee the pump capacity or future use up to the permitted pump capacity.

Well Owner: [Signature]
Date: 9-21-95

Landowner: [Signature]
Date: 9-21-95

Contractor: Waterwell Drilling
[Signature]
[Signature]
[Signature]
Date: 9-21-95

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

Longitude
Aquifer System Name
State Well No.
Remarks, Explanations (cont’d):

- SEE WELL CONSTRUCTION LIMITS FOR DETAILS ON WELL CONSTRUCTION

**9. PROPOSED WELL SECTION**

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

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

**Open Hole:**
- Length: __________ ft.
- Diameter: __________ in.

- Approximate elevation at time of filing application. Ground elevation above mean sea level (msl) by a surveyor licensed by the State must be submitted at start of construction. Final elevations of well components shall be submitted in the well completion/well abandonment reports.
<table>
<thead>
<tr>
<th>FROM:</th>
<th>DATE: 8/10</th>
<th>SUSPENSE DATE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>TO: INIT:</td>
<td>TO: INIT:</td>
<td>FOR: PLEASE:</td>
</tr>
<tr>
<td>R. LOUI</td>
<td>REGULATION BRANCH</td>
<td>APPROVAL</td>
</tr>
<tr>
<td>J. UWAIN</td>
<td></td>
<td>SIGNATURE</td>
</tr>
<tr>
<td>F. CHING</td>
<td></td>
<td>INFORMATION</td>
</tr>
<tr>
<td>S. SUBIA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>K. YODA</td>
<td></td>
<td>See Me</td>
</tr>
<tr>
<td>SURVEY BRANCH</td>
<td></td>
<td>Review &amp; Comment</td>
</tr>
<tr>
<td>E. HIRANO</td>
<td>PLANING BRANCH</td>
<td>Type Action</td>
</tr>
<tr>
<td>G. BAUER</td>
<td></td>
<td>Type Draft</td>
</tr>
<tr>
<td>R. HARDY</td>
<td></td>
<td>Type Final</td>
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<tr>
<td>N. FUJII</td>
<td></td>
<td>File</td>
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<tr>
<td>M. OHYE</td>
<td></td>
<td>Xerox copies</td>
</tr>
<tr>
<td>I. KUNIMURA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P. O. BOX 621
HONOLULU, HAWAII 96809

WELL CONSTRUCTION/PUMP INSTALLATION PERMIT
for
Wailuku Landfill Monitor Wells
Well Nos. 5125-01,02,03

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

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

STANDARD WELL CONSTRUCTION PERMIT CONDITIONS

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

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

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

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

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

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

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

Applicant's Signature: ___________________________ Date: ____________

Printed Name: _________________________________

Firm or Title: _________________________________

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

Attach.

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

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

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

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

Landowner: Same

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

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

Well Description:

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

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

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

Landowner: Same

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

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

<table>
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<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>
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<td>225 ft.</td>
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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.
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>
<th>Island</th>
<th>Well Name</th>
<th>Well No.</th>
<th>Application Type</th>
</tr>
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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.

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: LEN N. KAJIWARA  
Phone: 586-4294  
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 July 10, 1995.

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<td>Well Construction</td>
</tr>
</tbody>
</table>

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: Mr. William Devick
Phone: 587-0250
Signed: William Devick
Date: 7/10/95
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: County of Maui Management, Solid Waste Division
      Contact Person: David Wissmar Ph: 243-7843
      Address: 200 South High Street
               Wailuku, Maui, Hawaii 96793
   (b) LANDOWNER
      County of Maui, Dept. of Public Works & Waste Management, Solid Waste Division
      Firm/Name: David Wissmar
      Contact Person: 
      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

2. WELL LOCATION/NAME: Southeast section of Phase I/64-1
   Island: Maui
   Address: Central Maui Landfill, Pulehu Road
   Tax Map Key: (2)3-8-03:19

3. (a) PROPOSED WORK:
   Drill New Well
   • Alter Location
   • Modify Existing Well
   • Pumps
   • Other

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
   • Centrifugal
   • Other
   • Power Source:
   • Electric
   • Gas
   • Diesel
   • Other:

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

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:
   • D  COUA
   • SMA
   • EIS
   • EA
   • NONE
   • Other (explain)

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

CPR 258.54

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

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 commence 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 upon the proposed permit shall not constitute a determinant of cumulative water rights and shall not guarantee the pump capacity or future use to the permitted party. The applicant also understands that the approval of the proposed permit shall not constitute a determinant of cumulative water rights and shall not guarantee the pump capacity or future use to the permitted party.
Drill a borehole to approximately 15 feet below the groundwater elevation, and install a 4.5-inch diameter PVC monitoring well. Three wells will be completed for use in collecting groundwater samples for water quality assessment.

---

**8. PROPOSED WELL SECTION**

- **Elevation at top of casing:** 308 ft., mal.
- **Ground Elevation:** 305 ft., mal.
- **Cement Grout:** 288 ft.
- **Bentonite Seal:** 2 ft.
- **Sand Packing:** 25 ft.
- **Solid Casing:**
  - Material: PVC
  - Length: 295 ft.
  - Diameter: 4.5 in
  - Wall thickness: SCH 80
- **Hole Diameter:** 8 in.
- **Total Depth:** 315 ft.
- **Casing:**
  - Perforated
  - Screen
  - Material: PVC
  - Length: 20 ft.
  - Diameter: 4.5 in
  - Wall thickness: SCH 80
  - Openings: 22 sq. in./ft.
- **Open Hole:** None

---

*Approximate elevation at time of filing application. Ground elevation above mean sea level (msl) by a surveyor licensed by the State must be submitted at start of construction. Final elevations of well components shall be submitted in the well completion/well abandonment reports.*
WAILUKU — LANDFILL MONITOR WELLS
(5125-01, 02, 03 M)
COMMISSION ON WATER RESOURCE MANAGEMENT

FROM: E. Hirano
TO: R. LOUI
TO: J. UWAINE
TO: F. CHING
TO: S. SUBIA
TO: K. YODA
TO: E. HIRANO
TO: G. BAUER
TO: R. HARDY
TO: N. FUJII
TO: M. OHYE
TO: I. KUNIMURA

DATE: 6/30/95
SUSPENSE DATE: ____________________

PLEASE:

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

REGULATION BRANCH
FOR: E. SAKODA
FOR: D. HIGA
FOR: L. NAKAMA
FOR: C. ICE
FOR: R. JINNAI
FOR: S. SWANSON

APPROVAL
SIGNATURE
INFORMATION

PLANING BRANCH
FOR: S. EDMUNDS
FOR: 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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<th>Well Name</th>
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<th>Application Type</th>
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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.  

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: Ellen Kraft | Phone: 243-7835  
Signed: Ellena 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 808-668-9269.

1. APPLICANT: (may be a, b, or c, but all must be filled in)
   (a) WELL OWNER
      Firm/Name: County of Maui, Dept. of Public Works & Waste
      Contact Person: David Klammer
      Ph.: 243-7843
      Address: 200 South High Street
      Wailuku, Maui, Hawaii 96793
   (b) LANDOWNER
      Firm/Name: County of Maui, Dept. of Public Works & Waste
      Contact Person: David Klammer
      Ph.: 243-7843
      Address: 200 South High Street
      Wailuku, Maui, Hawaii 96793
   (c) CONTRACTOR
      Firm/Name: Waterwell Drilling
      Ph.: 877-3419
      Address: 343 Ali 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" = 2000', and a property tax map showing well location referenced to established property boundaries.)

3. (a) PROPOSED WORK:
   (b) WELL TYPE:
   Drill New Well
   Modify Existing Well
   Redrill
   Deepen
   * Abandon/Seal
   Install New Pump
   Replace Pump
   Modify Pump
   Be sure to complete and submit well abandonment report upon completion of work.
   Dug
   Bored
   Driven
   Drilled
   Pedal
   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.)
   Domestic (individual, non-commercial water sys.)
   Irrigation (crop)
   Military
   Industrial
   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
   Orifice Plate
   Open-pipe
   Other (explain)

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

8. REMARKS, EXPLANATIONS:
   5. Monitoring Well
   7. Regulation requirements for CER 258.54
   (If more space is needed, continue on back)

NOTE: Signing below indicates that the applicant understands that, if the permit requested is granted by the Commission on Water Resource Management, the proposed work is to be completed within two (2) years of the approval date. In addition, the contractor 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 concomitant water rights and shall not guarantee the pump capacity or future use up to the permitted pump capacity.

Well Owner
Signature: ____________
Date: ______/________/

Landowner
Signature: ____________
Date: ______/________/

Contractor
Signature: ____________
Date: ______/________/
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., mad

Cement Grout: 288 ft.
Bentonite Seal: 2 ft.
Hole Diameter: 8 in.

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:
- 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.
WAILUKU — LANDFILL MONITOR WELLS
(5125—01, 02, 03 M)
State of Hawaii
Department of Land and Natural Resources
COMMISSION ON WATER RESOURCE MANAGEMENT
Honolulu, Hawaii

JUN 28 1995

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>
<thead>
<tr>
<th>Island</th>
<th>Well Name</th>
<th>Well No.</th>
<th>Application Type</th>
</tr>
</thead>
<tbody>
<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. Manrique  
Phone:  599-1935  
Date:  06/27/95  

Signed:  Luis O. Waieje  
Date:  06/27/95
Mr. Thomas Arizumi, Chief
Environmental Management Division
State Department of Health
919 Ala Moana Blvd., 3rd Floor
Honolulu, Hawaii 96814

Attn: Mr. William Wong

Dear Mr. Arizumi:

Well Construction Permit Application

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

<table>
<thead>
<tr>
<th>Island</th>
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<tbody>
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<td>Walluku-Landfill Monitor Wells</td>
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<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: ___________________________ 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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<td>Well Construction</td>
</tr>
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</table>

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: ____________________________
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.

<table>
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<th>Well Name</th>
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<th>Application Type</th>
</tr>
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<td>Well Construction</td>
</tr>
</tbody>
</table>

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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<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:

() 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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<td>Well Construction</td>
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</table>

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

Sincerely,

RAE M. LOUI
Deputy Director

Response:

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

Contact Person: ___________________________  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.  

<table>
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<th>Well No.</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,  

[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: ____________________________
**Bank of Hawaii**
MAIN BRANCH, HONOLULU, HAWAII

No. 05732  69-102/1213

June 2  1995

**PAY TO THE ORDER OF Department of Land & Natural Resources** $75.00

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

Well permit application fee
For Job #94128-001

---

**DEPARTMENT OF LAND AND NATURAL RESOURCES**

**UAC OR ATTACHED WORKSHEET**    DATE: JUN 20 1995

<table>
<thead>
<tr>
<th>F YR APP</th>
<th>D</th>
<th>SRC/ OBJ</th>
<th>COST CTR</th>
<th>PROJECT</th>
<th>PH</th>
<th>ACT</th>
<th>AMOUNT</th>
</tr>
</thead>
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<td></td>
<td></td>
<td></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)

**NAME/DESCRIPTION (WANG INPUT):**
Bank of Hawaii
TO: Commission on Water Resource Management  
Department of Land and Natural Resources  
P. O. Box 621  
Honolulu, HI 96809

WE ARE SENDING YOU the following items:

<table>
<thead>
<tr>
<th>COPY</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: ____________________________  
Jennifer J. Cleveno, Associate

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, c, or d but all must be filled in)

(a) **WELL OWNER**

<table>
<thead>
<tr>
<th>Firm/Name</th>
<th>County of Maui, Dept. of Public Works &amp; Waste Management, Solid Waste Division</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact Person</td>
<td>David Whisean</td>
</tr>
<tr>
<td>Address</td>
<td>200 South High Street</td>
</tr>
<tr>
<td>City, State</td>
<td>Wailuku, Maui, Hawaii 96793</td>
</tr>
</tbody>
</table>

(b) **LANDOWNER**

<table>
<thead>
<tr>
<th>Firm/Name</th>
<th>County of Maui, Dept. of Public Works &amp; Waste Management, Solid Waste Division</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact Person</td>
<td>David Wissmar</td>
</tr>
<tr>
<td>Address</td>
<td>200 South High Street</td>
</tr>
<tr>
<td>City, State</td>
<td>Wailuku, Maui, Hawaii 96793</td>
</tr>
</tbody>
</table>

(c) **CONTRACTOR**

<table>
<thead>
<tr>
<th>Firm/Name</th>
<th>David Pico Waterwell Drilling</th>
<th>877-3419</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>333 Aiu Road</td>
<td></td>
</tr>
<tr>
<td>City, State</td>
<td>Wailuku, Maui Hawaii 96793</td>
<td></td>
</tr>
</tbody>
</table>

**5/25-01, 02, 03**

**2. WELL LOCATION/NAME:** Southeast section of Phase I/II-2

<table>
<thead>
<tr>
<th>Address</th>
<th>Central Maui Landfill, Pulehu Road</th>
</tr>
</thead>
<tbody>
<tr>
<td>City, State</td>
<td>Wailuku, Maui Hawaii 96793</td>
</tr>
</tbody>
</table>

(Attach a USGS map, scale 1"=2000', and a property tax map showing well location referenced to established property boundaries.)

**3. (a) PROPOSED WORK:**

<table>
<thead>
<tr>
<th>Drill New Well</th>
<th>Modify Existing Well</th>
<th>Install New Pump</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alter Location</td>
<td>Redrill</td>
<td>Replace Pump</td>
</tr>
<tr>
<td>Deepen</td>
<td>Abandon/Seal</td>
<td>Modify Pump</td>
</tr>
</tbody>
</table>

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

(b) **WELL TYPE:**

<table>
<thead>
<tr>
<th>Dug</th>
<th>Bored</th>
<th>Driven</th>
<th>Drilled</th>
<th>Radial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

**4. PROPOSED PUMP INFORMATION:**

<table>
<thead>
<tr>
<th>Pump Capacity:</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated Pump Capacity:</td>
<td>gallons per minute</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pump Type:</th>
<th>Deep Well Turbine</th>
<th>Submersible</th>
<th>Centrifugal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rotary Displacement</td>
<td>Rotary-Gear</td>
<td>Reciprocating</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Motor:</th>
<th>Deep Well Turbine</th>
<th>Submersible</th>
<th>Centrifugal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propeller</td>
<td>Impulse</td>
<td>Gas</td>
<td>Electric, rated horsepower of</td>
</tr>
</tbody>
</table>

**5. PROPOSED USE:**

<table>
<thead>
<tr>
<th>Municipal (including hotels, stores, etc.)</th>
<th>Domestic (individual, noncommercial water use)</th>
<th>Irrigation (crop)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Military</td>
<td>Industrial</td>
<td>Other (explain)</td>
</tr>
</tbody>
</table>

State Land Use District: Urban Agriculture

County Zoning: (describe) Agriculture

(Fill in the diagram on the back of this form.)

**6. (a) PROPOSED AMOUNT OF WITHDRAWAL:**

<table>
<thead>
<tr>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>gallons per day</td>
</tr>
</tbody>
</table>

(b) **METHOD OF FLOW MEASUREMENT:**

<table>
<thead>
<tr>
<th>Flow-meter</th>
<th>Open-pipe</th>
<th>Orifice Plate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**7. PENDING ACTIONS:**

<table>
<thead>
<tr>
<th>CDUA</th>
<th>SNA</th>
<th>EIS</th>
<th>EA</th>
<th>NONE</th>
<th>Other (explain)</th>
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<td></td>
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**8. REMARKS, EXPLANATIONS:**


CFR 258.54

(If more space is needed, continue on back)

**NOTE:** Signing below indicates that the applicant understands that, if the permit requested is granted by the Commission on Water Resource Management, the proposed work is to be completed within two (2) years of the approval date. In addition, the contractor shall submit to the Commission a well completion report, well abandonment report, or both, within 30 days after completion date of the permitted work. The applicant also understands that monthly water use data shall be submitted to the Commission. The applicant further understands that approval of the proposed permit shall not constitute a determination of permissible water rights and shall not guarantee the pump capacity or future use up to the permitted pump capacity.
All a borehole to approximately 315 ft. 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. mal.
- Ground Elevation: 305 ft. mal.
- Cement Grout: 288 ft.
- Bentonite Seal: 2 ft.
- Sand: 25 ft.
- Hol 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.
1. **APPLICANT:** (may be a, b, or c, but all must be filled in)
   - **(a) WELL OWNER:**
     - County of Maui, Dept. of Public Works & Waste
     - Firm/Name: Management, Solid Waste Division
     - Contact Person: David Wissmar
     - Ph.: 243-7843
     - Address: 200 South High Street
     - Wailuku, Maui, Hawaii 96793

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

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

2. **WELL LOCATION/NAME:**
   - North section of Phase III/W-2
   - Island, Maui
   - Address: Central Maui Landfill, Pulehu Road
   - Tax Map Key: (2) 3-8-0319

3. **(a) PROPOSED WORK:**
   - Drill New Well
   - Modify Existing Well
   - Install New Pump
   - Replacce 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
   - Pump Type:
     - Deep Well Turbine
     - Submersible
     - Centrifugal
     - Rotary
     - Rotary-Displacement
     - Reciprocating
     - Rotary-Gear
     - Impulse
   - Motor:
     - Diesel
     - Gas
     - Electric, rated horsepower of

5. **PROPOSED USE:**
   - Municipal (including hotels, stores, etc.)
   - Domestic (individual, noncommercial water use)
   - Irrigation (crop)
   - State Land Use District:
     - Urban
     - Agriculture
     - Rural
     - Conservation
   - County Zoning (describe)
   - Agriculture

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

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

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

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

- Elevation at top of casing: 215 ft. mat.
- Ground Elevation: 215 ft., mat.
- Cement Grout: 198 ft.
- Bentonite Seal: 2 ft.
- Sand: 25 ft.
- Hole Diameter: 8 in.
- Total Depth: 225 ft.

**Solid Casing:**
- Material: PVC
  - Length: 205 ft.
  - Diameter: 4.5 in.
  - Wall thickness: SCH 80

**Casing:**
- Perforated: None
- Screen: None

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

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

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

1. APPLICANT: (may be a, b, or c, but all must be filled in)
   (a) WELL OWNER
      County of Maui, Dept. of Public Works & Waste
      Firm/Name: Management
      Contact Person: David Wissmar
      Ph.: 243-7843
      Address: 200 South High Street
      Wailuku, Maui, Hawaii 96793
   (b) LANDOWNER
      County of Maui, Dept. of Public Works & Waste
      Firm/Name: Management, Solid Waste Division
      Contact Person: David Wissmar
      Ph.: 243-7843
      Address: 200 South High Street
      Wailuku, Maui, Hawaii 96793
   (c) CONTRACTOR
      David Pico
      Firm/Name: Waterwell Drilling
      Ph.: 877-3419
      Address: 343 Alu Road
      Wailuku, Maui Hawaii 96793

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

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

   (b) WELL TYPE:
      Drill
      Driven
      Radial
      Be sure to complete and submit abandonment report upon completion of work.

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

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

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

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

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

NOTE: Signing below indicates that the applicant understands that, if the permit requested is granted by the Commission on Water Resource Management, the proposed work is to be completed within two (2) years of the approval date. In addition, the contractor shall submit to the Commission a well completion report, well abandonment report, or both, within 30 days after completion date of the permitted work. The applicant also understands that monthly well 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.

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

9. PROPOSED WELL SECTION

- **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.
- **Solid Casing:**
  - **Material:** PVC
  - **Length:** 230 ft.
  - **Diameter:** 4.5 in.
  - **Wall thickness:** SCH 80
- **Casing:**
  - **Material:** PVC
  - **Perforated:**
    - **Length:** 20 ft.
    - **Diameter:** 4.5 in.
    - **Wall thickness:** SCH 80
    - **Openings:** 22 sq. in./L.F.
  - **Screen:**
    - **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.