February 10, 2012

Mr. Imiola Lindsey, P.E.
Kamehameha Schools
Land Asset Division
78-6831 Alii Drive
Kailua-Kona, HI 96740

Dear Mr. Lindsey:

Commission on Water Resource Management
Meeting: Wednesday, February 15, 2012 (9:00 a.m.)
Review of Water Use Permits
Partial and/or Complete Revocations
Waialua Ground Water Aquifer System Area, Waialua, Oahu

On February 15, 2012, the Commission on Water Resource Management (Commission) will meet and review all water use permits in the Waialua Ground Water System Area. Enclosed is a copy of the staff submittal recommending partial or complete revocation or continuation of existing ground water use permits. Your well is among those which will be reviewed and acted upon.

You are invited to attend and discuss your wells. The meeting is scheduled for 9:00 a.m. in the DLNR Board Room 132, 1151 Punchbowl Street, Honolulu, Hawaii.

This meeting follows a review of all water use permits, information available in the public record, and field visits. Many of the ground water use permits date back to 1981 when the Waialua Ground Water Control Area was designated by the Board of Land Natural Resources. Many wells are old. Much of the water use approved at that time was for plantation agriculture, which has subsequently ceased. Unused allocations need to be revoked to make ground water available for new uses. The Commission will consider wellhead conditions for old wells in order to meet current standards for protecting ground water.

If you have any questions, please contact Charley Ice of our staff at (808) 587-0218.

Sincerely,

WILLIAM M. TAM
Deputy Director

CI:ss
Enclosure (Submittal)
<table>
<thead>
<tr>
<th>FROM: Charley</th>
<th>COMMISSION ON WATER RESOURCE MANAGEMENT</th>
<th>DATE: 06 Sep M</th>
</tr>
</thead>
<tbody>
<tr>
<td>TO: IMATA, R.</td>
<td>TO: TAM, W.</td>
<td>INIT. 1</td>
</tr>
<tr>
<td>TO: UYENO, D.</td>
<td>TO: HARDY, R.</td>
<td>INIT. 3</td>
</tr>
<tr>
<td>TO: CHONG, R.</td>
<td>TO: OHYE, L.N.</td>
<td>INIT. 2</td>
</tr>
<tr>
<td>TO: FUJII, N.</td>
<td>FOR: Approval</td>
<td>PLEASE: Review &amp; Comment</td>
</tr>
<tr>
<td>TO: KIMURA, J.</td>
<td>Signature</td>
<td>Type Draft</td>
</tr>
<tr>
<td>TO: YOSHINAGA, M.</td>
<td>Information</td>
<td>Type Final</td>
</tr>
<tr>
<td>TO: KUNIMURA, I.</td>
<td>File</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Copies:</td>
<td>Take Action:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Please See Me</td>
</tr>
</tbody>
</table>

- I think 3505-02, 03, 08, 13 were the 4 changed wells - what do the WCS say?
- Need to review files & recent WCSs - answers may already be there.

That's where I start; also, registration, staying (see diagram) not useful probably pointless to ask
September 9, 2011

Mr. Imiola Lindsey, P.E.
Kamehameha Schools LAD
78-6831 Alii Drive, Suite 235
Kailua-Kona, HI 96740

Dear Mr. Lindsey:

Water Use Permits 894 & 895
Well Nos. 3505-01 to -20 ("Pump 3") and 3506-03 ("Pump 8")

Thank you for your letter response sent by email on September 6, 2011, addressing questions we raised in our letter dated August 9, 2011. We appreciate your commitment to agriculture on the North Shore and thank you for your update on activities in support. Thank you also for water use reporting for July and August of this year.

We understand that your current use is not the full amount of the existing water use permits, and accept that the amounts you will need to support future growth of agriculture on these lands will require the full approved allocations of 1.552 and 1.660 mgd. We are inclined to recommend maintaining these amounts.

If you have any questions, please contact Charley Ice of our staff at (808) 587-0218.

Sincerely,

WILLIAM M. TAM
Deputy Director

CI:ss
Aloha Roy,

Please find the attached memo addressed to Mr. Tam. We are following up with a hard copy via regular mail, but thought to email this to make sure that you and your staff received this in a timely manner.

Thank you, Imi

ʻ Imi ola Lindsey, PE
Kamehameha Schools LAD

This message is the property of Kamehameha Schools and any attachments are confidential to the intended recipient at the e-mail address to which it has been addressed. If you are not the intended recipient, you may not copy, forward, disclose or use any part of this message or its attachments. If you received this transmission in error please notify the sender immediately by e-mail or contact Kamehameha Schools at 808 523 6200 and then delete this message from your system.

Memo_9_6_11.pdf
William M. Tam  
Deputy Director  
CWRM  
PO Box 621  
Honolulu, Hawaii 96809

Dear Mr. Tam:

The following is in response to your letter dated August 9th, 2011, regarding water use permits 894 & 895 (Pumps 3 & 8).

With the recent transfer of the water use permits to Kamehameha Schools (KS), we have contracted a third party to monitor Pumps 3 & 8 per CWRM requirements. Attached are the monthly reports beginning June of this year.

Until recently, Pumps 3 & 8 existed as aging infrastructure from the plantation era. As such, there were complicating issues for monitoring each source, which is the reason for the lag between issuance of the permits and collection of monitoring data. Originally the pumps existed as a battery of underground wells along a common header, so taking the required measurements was impractical. For the most part, such difficulties have been overcome with recent and on-going improvement projects.

KS has made significant financial investments in the water system served by Pumps 3 & 8 as part of a larger decision to support local agriculture, with over $10 million invested over the past 5 years. Additional work is in progress, and the system is planned for substantial completion by 2015.

A significant part of the investment to date, as discussed and approved by CWRM staff, was the improvement of four of the original 20 wells located at Pump 3, by isolating them from the below ground header piping, and extending/grouting the well casings to ground level. Two of these four modernized wells were outfit with well pumps and controls. KS also has near term plans to equip the remaining two wells with pump hardware.

With regard to the entire irrigation system, additional improvements were made to

- minimize transmission loss by replacing aging ditches with pressurized transmission lines
- centrally filter surface water to reduce in-field costs
- improve & decommission reservoirs, per new State regulations

All of the above-mentioned and future improvements were sized with the current water allocations (1.552 & 1.660 mgd) in mind, and the completed system, which will require 6 mgd across 2,765 acres. The majority of this demand will be served by surface water, however, Pumps 3 & 8 will be relied on heavily during periods of low rainfall.

In addition to completing the upgrade of Pump 3, KS has similar near term plans for improving Pump 8. Both sources are essential for the revitalization of agriculture in Haleiwa, as reflected by the recent improvements and the money invested.

Recent monitoring data from Pumps 3 & 8 (attached) is the most accurate accounting of usage to date, and KS is committed to continuing this monitoring per CWRM requirements. It should be noted that for the next 3 years or so, water usage numbers will not reflect true long term demand, as improvement projects continue...
throughout the system. A significant variation in pumpage throughout the year is also anticipated, with dry and wet periods not always occurring during the same months and for the same duration. Furthermore, the usage values are likely to be artificially low for several years until such time that we can complete the upgrades to our comprehensive irrigation system and put the full 2,765 acres to productive agricultural use.

During semi-annual dry periods, Pumps 3 & 8 are the sole source of water for crops on KS Haleiwa land. The wells in question provide vital security to agriculture throughout the year. These allocations are crucial to the support and revival of local agriculture, and it is essential that KS maintains the permitted amounts of 1.552 mgd (Pump 3) and 1.660 mgd (Pump 8).

Please feel free to call me if you have any questions or if you would like to discuss this matter further.

Sincerely,

[Signature]

'Imi ola Lindsey, PE
Kamehameha Schools LAD
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
MONTHLY GROUND WATER USE REPORT

Name: [KS]  July, 2011

Company:
Address:
Telephone No.: 
Fax No.: 
Report Month: 
Year: 

INSTRUCTIONS: Please TYPE OR PRINT CLEARLY. Complete this form to report total monthly ground water use, and, if required, other information from each of your well sources. Mail to: Commission on Water Resource Management, P.O. Box 621, Honolulu, HI 96809. For assistance, please call (808) 587-0285.

<table>
<thead>
<tr>
<th>State Well No.</th>
<th>Well Name</th>
<th>Period Begin Date (mm/dd/yy)</th>
<th>Period End Date (mm/dd/yy)</th>
<th>Quantity Pumped (gallons)</th>
<th>Method of Measurement</th>
<th>Chloride (mg/l)</th>
<th>Temp. (°F)</th>
<th>Non-Pumping Water Level (ft above msl)**</th>
</tr>
</thead>
<tbody>
<tr>
<td>3356-02</td>
<td>OPAKULA PUMP BATTERY</td>
<td>07/01/11</td>
<td>07/27/11</td>
<td>29,142,522</td>
<td>FLOW METER</td>
<td>40</td>
<td>73</td>
<td>10,2'</td>
</tr>
<tr>
<td>3356-03</td>
<td>OPAKULA PUMP BATTERY</td>
<td>07/01/11</td>
<td>07/27/11</td>
<td>0.515</td>
<td>FLOW METER</td>
<td>85</td>
<td>73</td>
<td>10.3'</td>
</tr>
</tbody>
</table>

* Flow meter, electrical consumption, weir or flume, not metered (estimated).
** Measurement should be taken while pump is NOT running just prior to a pumping cycle; if measurement is taken while pump is running, please indicate so.

Other comments or additional information (e.g., date and method of chloride measurement, how pumpage amounts are estimated, etc.):

Submitted by (print): SID KENT  8/1/11
Title: 
Signature: 
Date: 

GWUR-MON FORM (06/10/2004)
**State of Hawaii**  
**COMMISSION ON WATER RESOURCE MANAGEMENT**  
**Department of Land and Natural Resources**  
**MONTHLY GROUND WATER USE REPORT**

**Name:** (KS)  
**Report Month:** AUGUST 2011  
**Telephone No.:**  
**Fax No.:**

---

**INSTRUCTIONS:** Please TYPE OR PRINT CLEARLY. Complete this form to report total monthly ground water use, and, if required, other information from each of your well sources. Mail to: Commission on Water Resource Management, P.O. Box 621, Honolulu, HI 96809. For assistance, please call (808) 587-0265.

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<th>Quantity Pumped (gallons)</th>
<th>Method of Measurement*</th>
<th>Chloride (mg/L)</th>
<th>Temp. (°F)</th>
<th>Non-Pumping Water Level (ft. above mean)**</th>
</tr>
</thead>
<tbody>
<tr>
<td>3606-02</td>
<td>OKEELIA PUMP 3 BATTERY</td>
<td>07/27/11</td>
<td>8/31/11</td>
<td>27,404,000</td>
<td>Flowmeter</td>
<td>40</td>
<td>72</td>
<td>10.3'</td>
</tr>
<tr>
<td>3606-03</td>
<td>OKEELIA PUMP 8 BATTERY</td>
<td>07/27/11</td>
<td>8/24/11</td>
<td>10,070,000</td>
<td>Flowmeter</td>
<td>90</td>
<td>79</td>
<td>10.3'</td>
</tr>
</tbody>
</table>

* Flow meter, electrical consumption, weir or flume, not metered (estimated).
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---

Submitted by (print):  
**Signature:**  
**Date:**

**Title:**

---

GWUR-MON FORM (06/10/2004)
Photo 1. Improved Wells “B” & “C”, piping at ground level

Photo 2. Cross country ditch lined with new pipe for efficient transmission of water
Photo 3. Fully functional central filtration station sized for 6 mgd

Photo 4. Improved Opa‘ula 1 reservoir, main storage for surface water
**State of Hawaii**
**COMMISSION ON WATER RESOURCE MANAGEMENT**
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**MONTHLY GROUND WATER USE REPORT**

<table>
<thead>
<tr>
<th>State Well No.</th>
<th>Well Name</th>
<th>Period Start Date</th>
<th>Period End Date</th>
<th>Sum of Output</th>
<th>Method of Measurement</th>
<th>Degree</th>
<th>Secant</th>
<th>Well Diameter</th>
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<tbody>
<tr>
<td>9905-02-20-20</td>
<td>OPAEULA Pump 3 Battery</td>
<td>05/24/11</td>
<td>07/01/11</td>
<td>20,652,078</td>
<td>Flow meter</td>
<td>100</td>
<td>70°</td>
<td>10.3'</td>
</tr>
<tr>
<td>9906-03-20-20</td>
<td>OPAEULA Pump 4 Battery</td>
<td>05/20/11</td>
<td>07/01/11</td>
<td>13,623,000</td>
<td>Flow meter</td>
<td>75</td>
<td>70°</td>
<td>10.1'</td>
</tr>
</tbody>
</table>

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Submitted by (print): **SID KIEN** 7/9/11
Title: ________________________________
Signature: ____________________________ Date: ________________________________

GWUR-MON FORM (06/10/2004)
### Depths of the 20 Wells Which Supply Pump 3

<table>
<thead>
<tr>
<th>Letter Designation</th>
<th>State Well Number</th>
<th>Year Drilled</th>
<th>Depth (Feet)</th>
<th>Letter Designation</th>
<th>State Well Number</th>
<th>Year Drilled</th>
<th>Depth (Feet)</th>
</tr>
</thead>
<tbody>
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<td>A</td>
<td>3505-01</td>
<td>1899</td>
<td>428</td>
<td>B</td>
<td>3505-02</td>
<td>1899</td>
<td>348</td>
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<tr>
<td>M</td>
<td>-13</td>
<td>1902</td>
<td>400</td>
<td>C</td>
<td>-03</td>
<td>1899</td>
<td>350</td>
</tr>
<tr>
<td>N</td>
<td>-14</td>
<td>1902</td>
<td>400</td>
<td>D</td>
<td>-04</td>
<td>1899</td>
<td>350</td>
</tr>
<tr>
<td>O</td>
<td>-15</td>
<td>1902</td>
<td>400</td>
<td>E</td>
<td>-05</td>
<td>1899</td>
<td>350</td>
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<td>1900</td>
<td>343</td>
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<tr>
<td>Q</td>
<td>-17</td>
<td>1902</td>
<td>400</td>
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<td>-07</td>
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<td>400</td>
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<td>-08</td>
<td>1900</td>
<td>350</td>
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<td>S</td>
<td>-19</td>
<td>1913</td>
<td>400</td>
<td>I</td>
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<td>1900</td>
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<td>T</td>
<td>-20</td>
<td>1913</td>
<td>400</td>
<td>J</td>
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<td>1900</td>
<td>350</td>
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<td>K</td>
<td>-11</td>
<td>1900</td>
<td>350</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>L</td>
<td>-12</td>
<td>1902</td>
<td>400</td>
</tr>
</tbody>
</table>

**Note:**

1. All wells have 12-inch casing but casing depths and length of perforated sections, if any, are not known.

2. The source of information is Stearns & Vaksvik (1938:191-192). The battery of wells is listed as Nos. 331A to T.

3. Well B is presently disconnected from the manifold system. According to plantation personnel, the valve separating the 3A and 3B wells is open so that Pump 3A draws water from all 19 of the other wells in the battery.
Exhibit 3
Layout of Well Nos. 3505-01 to -20 and WSCO Pumps 3A and 3B

From "Plan of Pump-3 Wells" by John Duarte, July 22, 1920
KAMEHAMEHA SCHOOLS

William M. Tam
Deputy Director
CWRM
PO Box 621
Honolulu, Hawaii 96809

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Department of Land and Natural Resources
MONTHLY GROUND WATER USE REPORT

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<table>
<thead>
<tr>
<th>WELL</th>
<th>DATE</th>
<th>RATE (GPM)</th>
<th>TOTAL (GALLONS)</th>
<th>RATE (GPM)</th>
<th>TOTAL (GALLONS)</th>
<th>RATE (GPM)</th>
<th>TOTAL (GALLONS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3508-02</td>
<td>05/24/11</td>
<td>20,652.076</td>
<td>20,652.076</td>
<td>100</td>
<td>70°</td>
<td>10.3'</td>
<td></td>
</tr>
<tr>
<td>3508-03</td>
<td>05/20/11</td>
<td>13,623,000</td>
<td>13,623,000</td>
<td>75</td>
<td>70°</td>
<td>10.1'</td>
<td></td>
</tr>
</tbody>
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Other comments or additional information (e.g., date and method of chloride measurement, how pumpage amounts are estimated, etc.):

Submitted by (print): E10 KENT 7/9/11
Title: ________________________
Signature: ____________________ Date: ____________________

GWUR-MON FORM (06/10/2004)
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
MONTHLY GROUND WATER USE REPORT

Name: ____________________________
Company: __________________________
Address: ____________________________

Telephone No.: ____________________________ Fax No.: ____________________________
Report Month: ____________________________ Year: ____________________________

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<tr>
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<td>07/01/11</td>
<td>07/27/11</td>
<td>23,192,522</td>
<td>Flow meter</td>
<td>40</td>
<td>73</td>
<td>10.2'</td>
</tr>
<tr>
<td>3506-03</td>
<td>OPABULA PUMP B BATTERY</td>
<td>07/01/11</td>
<td>07/27/11</td>
<td>13,918,000</td>
<td>Flow meter</td>
<td>85</td>
<td>73</td>
<td>10.3'</td>
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Title: ____________________________
Signature: ____________________________ Date: ____________________________

GWUR-MON FORM (06/10/2004)
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
MONTHLY GROUND WATER USE REPORT

AUGUST 2011

Name: 
Company: 
Address: 

Telephone No.: 
Fax No.: 

Report Month: 
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<tr>
<td>3502-02</td>
<td>OPAEULA PUMP 3</td>
<td>07/27/11</td>
<td>8/31/11</td>
<td>27,404,000</td>
<td>Flowmeter</td>
<td>40</td>
<td>72</td>
<td>10.3'</td>
</tr>
<tr>
<td>3502-03</td>
<td>BATTERY</td>
<td>07/27/11</td>
<td>8/31/11</td>
<td>10,070,000</td>
<td>Flowmeter</td>
<td>90</td>
<td>79</td>
<td>10.3'</td>
</tr>
<tr>
<td>3502-04</td>
<td>BATTERY</td>
<td>07/27/11</td>
<td>8/31/11</td>
<td>10,070,000</td>
<td>Flowmeter</td>
<td>90</td>
<td>79</td>
<td>10.3'</td>
</tr>
</tbody>
</table>

* Flow meter, electrical consumption, weir or flume, not metered (estimated).
** Measurement should be taken while pump is NOT running just prior to a pumping cycle; if measurement is taken while pump is running, please indicate so.

Other comments or additional information (e.g., date and method of chloride measurement, how pumpage amounts are estimated, etc.):

Submitted by (print): SID KENT 07/11
Title: 

Signature: 
Date: 

GWUR-MON FORM (06/10/2004)
TO: IMATA, R.  
UYENO, D.  
CHONG, R.  
FUJII, N.  
KIMURA, J.  
YOSHINAGA, M.  
KUNIMURA, I.  

INIT. TO: TAM, W.  
HARDY, R.  
OHYE, L.N.  

INIT. FOR: Approval  
Signatures  
Information

PLEASE: Review & Comment  
Type Draft  
Type Final  
File  
Copies:  
Take Action:  

Please See Me

A major problem, to me, is the incomplete record surrounding the WUPs approved 6/2/93 — virtually, no documentation at the time. A supplementary meeting handout ("Additional Recommendations") identified 3 pump batteries for specific reductions — no WUPs, and the folders do not reflect WUP#. The DB tracks it, but misidentifies the transfer date of WSC #137 to KS #94, while maintaining allocations for well sealed and revoked Sept. 2002. The "approval" for other WSC batteries has no reference in the submitted or minutes of 6/2/93. Hopefully, we can straighten it out now.
August 9, 2011

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Kaeo Duarte
Kamehameha Schools
567 South King Street, Suite 200
Honolulu, HI 96813

Dear Mr. Duarte:

20-Year Water Use Permit Review and Current Water Use Reporting

Your Water Use Permit Nos. 894 & 895 for the amounts of 1.552 mgd and 1.660 mgd, respectively, from "Pump 3" battery (Well Nos. 3505-01 to -18) and "Pump 8" (Well No. 3506-03) were approved as transfers from Waialua Sugar Company by the Commission on Water Resource Management (Commission) on July 7, 2010. As part of our recent 20-year review of water use permits, required by the State Water Code, we note that there is no reporting of water use from these wells, as required by your permit.

Unused water that has been previously allocated is subject to revocation in accordance with Hawaii Revised Statutes §174C-58(4) and standard water use permit condition #15:

After a hearing, the commission may suspend or revoke a permit for:
Partial or total nonuse, for reasons other than conservation, of the water allowed by the permit for a period of four continuous years or more.

Please transmit water use reports for the period under your control, and indicate if you are willing to voluntarily relinquish any of your 4-year unused amount. If you are not willing to voluntarily relinquish any amount, please explain why any unused amount should not be revoked by the Commission (after a hearing).

Please respond in writing no later than 30 days from the date of this letter.

If you have any questions, please contact Charley Ice of our staff at (808) 587-0218.

Sincerely,

WILLIAM M. TAM
Deputy Director

Cl:ss
CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Imiola Lindsey
Kamehameha Schools
78-6831 Alii Drive, Suite 235
Kailua-Kona, HI 96740

Dear Mr. Lindsey:

Transfer of Water Use Permit (WUP No. 137 to WUP No. 894) for Well No. 3505-01 to -20

**Waialua Ground-Water Management Area, Oahu**

We have received your Request to Transfer Water Use Permit for the subject well. Please note that as part of the transfer process, we have assigned a new Water Use Permit Number for this well. This is for record keeping purposes only and voids and supercedes the previous Water Use Permit Number listed above. As provided by law, your notice of transfer simply notifies us of the transfer of the permit and does not create any new rights and liabilities in favor of or against the transferee.

This letter transmits your water use permit for Opaeula Pump 3 Well Battery (Well Nos. 3505-01 to -20) for use of **1.552 million gallons per day (mgd)** of water on a 12-month moving average basis that was approved by the Commission on Water Resource Management (Commission) on June 2, 1993. As part of the Commission's approval, the following special conditions were added and are part of your permit under Standard Permit Condition 19:

**Special Conditions**

1. Should an alternate permanent source of water be found for this use, then the Commission reserves the right to revoke this permit, after a hearing.

2. In the event that the tax map key at the location of the water use is changed, the permittee shall notify the Commission in writing of the tax map key change within thirty (30) days after the permittee receives notice of the tax map key change.

Enclosed with this letter of approval are the following:

1. Your water use permit
2. Your official monthly water use report form
Please be sure to read the conditions of your approved permit.

We draw your attention to two key conditions of your permit that require your response. First, you are required to keep a record of your monthly total pumpage, water level, salinity, and water temperature. This information must be submitted to the Commission on a regular monthly basis using the enclosed water use report form. You should make copies of the enclosed report form as needed.

Second, you are required to submit a water shortage plan to the Commission within thirty (30) days of the issuance date of this permit. Your water shortage plan simply identifies what you are willing to do should the Commission declare a water shortage situation in the Waialua Ground-Water Management Area and can be as short as a one page letter. In a water shortage situation, the Commission may require temporary reductions in pumpage from all sources. The Commission is required, by law, to formulate a plan to implement such area-wide reductions, which should accommodate, include, and be consistent with your plans. Therefore, your help, by submitting your water shortage plan, is greatly needed in formulating the Commission's overall Water Shortage Plan.

If you have any questions, please call Charley Ice of the Commission staff at 587-0218.

Sincerely,

[Signature]
LAURA H. THIELEN
Chairperson

Attachments: WUR Form

c: Honolulu BWS
GROUND-WATER USE PERMIT
WUP NO. 894

PERMITTEE

Permittee/Water User
Address Kamehameha Schools
78-6831 Alii Drive, Suite 235
Kailua-Kona, HI 96740

Landowner of Source
Address Kamehameha Schools
78-6831 Alii Drive, Suite 235
Kailua-Kona, HI 96740

PERMITTED SOURCE INFORMATION

Island Oahu
Water Management Area North
Aquifer Sector Waialua
Aquifer System 25
System Sustainable Yield
Well Name Opaeula Pump 3
State Well No. 3505-01 to -20

PERMITTED USE INFORMATION

Reasonable beneficial use Agriculture
Withdrawal (12 month moving ave.) 1.552 mgd
Location of water use
TMK # (1) 6-2-010-001
State land use classification AG
County zoning classification Ag1 - P

Pursuant to Hawaii's State Constitution, Article XI, Section 7, Hawaii Revised Statutes, Chapter 174C; Hawaii Administrative Rules, Chapters 13-167 through 13-171; and Hawaii decisional law and custom, the permittee is hereby authorized to use ground water from the sources and in the amount and from and upon the locations described above; subject however, to the requirements of law including but not limited to the following conditions:
1. The water described in this water use permit may only be taken from the location described and used for the reasonable beneficial use described at the location described above. Reasonable beneficial uses means "the use of water in such a quantity as is necessary for economic and efficient utilization which is both reasonable and consistent with State and County land use plans and the public interest." (HRS § 174C-3)

2. The right to use ground water is a shared use right.

3. The water use must at all times meet the requirements set forth in HRS § 174C-49(a), which means that it:
   a. Can be accommodated with the available water source;
   b. Is a reasonable-beneficial use as defined in HRS § 174C-3;
   c. Will not interfere with any existing legal use of water;
   d. Is consistent with the public interest;
   e. Is consistent with State and County general plans and land use designations;
   f. Is consistent with County land use plans and policies; and
   g. Will not interfere with the rights of the Department of Hawaiian Home Lands as provided in section 221 of the Hawaiian Homes Commission Act and HRS § 174C-101(a).

4. The ground-water use here must not interfere with surface or other ground-water rights or reservations.

5. The ground-water use here must not interfere with interim or permanent instream flow standards. If it does, then:
   a. A separate water use permit for surface water must be obtained in the case an area is also designated as a surface water management area;
   b. The interim or permanent instream flow standard, as applicable, must be amended.

6. The water use authorized here is subject to the requirements of the Hawaiian Homes Commission Act, as amended, if applicable.

7. The water use permit application and submittal, as amended, approved by the Commission at its June 2, 1993 meeting are incorporated into this permit by reference.

8. Any modification of the permit terms, conditions, or uses may only be made with the express written consent of the Commission.

9. This permit may be modified by the Commission and the amount of water initially granted to the permittee may be reduced if the Commission determines it is necessary to:
   a. protect the water sources (quantity or quality);
   b. meet other legal obligations including other correlative rights;
   c. insure adequate conservation measures;
   d. require efficiency of water uses;
   e. reserve water for future uses, provided that all legal existing uses of water as of June, 1987 shall be protected;
   f. meet legal obligations to the Department of Hawaiian Home Lands, if applicable; or
   g. carry out such other necessary and proper exercise of the State's and the Commission's police powers under law as may be required.

Prior to any reduction, the Commission shall give notice of its proposed action to the permittee and provide the permittee an opportunity to be heard.

10. An approved flowmeter(s) must be installed to measure monthly withdrawals and a monthly record of withdrawals, salinity, temperature, and pumping times must be kept and reported to the Commission on Water Resource Management on forms provided by the Commission on a monthly basis (attached).
11. This permit shall be subject to the Commission's periodic review of the Waialua Aquifer System's sustainable yield. The amount of water authorized by this permit may be reduced by the Commission if the sustainable yield of the Waialua Aquifer System, or relevant modified aquifer(s), is reduced.

12. A permit may be transferred, in whole or in part, from the permittee to another, if:
   a. The conditions of use of the permit, including, but not limited to, place, quantity, and purpose of the use, remain the same; and
   b. The Commission is informed of the transfer within ninety days.

Failure to inform the department of the transfer invalidates the transfer and constitutes a ground for revocation of the permit. A transfer, which involves a change in any condition of the permit, including a change in use covered in HRS § 174C-57, is also invalid and constitutes a ground for revocation.

13. The use(s) authorized by law and by this permit do not constitute ownership rights.

14. The permittee shall request modification of the permit as necessary to comply with all applicable laws, rules, and ordinances that will affect the permittee's water use.

15. The permittee understands that under HRS § 174C-58(4), that partial or total nonuse, for reasons other than conservation, of the water allowed by this permit for a period of four (4) continuous years or more may result in a permanent revocation as to the amount of water not in use. The Commission and the permittee may enter into a written agreement that, for reasons satisfactory to the Commission, any period of nonuse may not apply towards the four-year period. Any period of nonuse which is caused by a declaration of water shortage pursuant to section HRS § 174C-62 shall not apply towards the four-year period of forfeiture.

16. The permittee shall prepare and submit a water shortage plan within 30 days of the issuance of this permit as required by HAR § 13-171-42(c). The permittee's water shortage plan shall identify what the permittee is willing to do should the Commission declare a water shortage in the Waialua Ground-Water Management Area.

17. The water use permit shall be subject to the Commission's establishment of instream standards and policies relating to the Stream Protection and Management (SPAM) program, as well as legislative mandates to protect stream resources.

18. The permittee understands that any willful violation of any of the above conditions or any provisions of HRS § 174C or HAR § 13-171 may result in the suspension or revocation of this permit.

19. Special conditions in the attached cover transmittal letter are incorporated herein by reference.

LAURA H. THIELEN, Chairperson
Commission on Water Resource Management

Attachment
FROM: CHARLEY
DATE: 20-May-10
SUSPENSE DATE: 27-May-10

TO: INIT. TO: INIT. FOR: PLEASE:
FUJII, N. NAKIMURA, I. Approval 1 See Me
4 HARDY, R. YODA, K. Signature 3 Review & Comment
5 ICE, C. YOSHINAGA, M. Information
3 IMATA, R. KUNIMURA, I. Approval

DATE: 20-May-10
SUSPENSE DATE: 27-May-10

PLEASE:
1 See Me
2 Review & Comment
3 Action
4 Type Draft acknowledgment letter
5 Type Final, label file folder, update People.db
6 File & Input Issue Date
7 Xerox copies
8 Type Draft acknowledge letter
9 Take Action
10 Send
11 Print
12 Update

WELL NUMBER 3505-01 to 20 WELL NAME Pump 3

WUP Number Old=137/ New= 894

WELL CONSTRUCTION PUMP INSTALLATION

ATTACHMENTS FOR APPLICATION PROCESSING - Both applicant & staff generated
1 TRANS. LETTER
2 PERMIT PROCESS TABLE
3 CWRM MAPS
4 APPL. FORM (11 COPIES)
5 USGS MAPS (11 COPIES)
6 TAX MAPS (11 COPIES)
7 PARCEL OWNER VERIF.
8 CONTRACTOR VERIF.
9 ALL INFO FILLED IN
10 BACKGROUND CHECK
11 $25 FEE DEPOSIT SLIP
12 DHP/CDUP/SMA pre-screen

FOLDER:
[ ] MADE NEW FILE FOLDER, ATTACHED
[ ] FILE FOLDER ALREADY MADE, IN FILE CABINET

INCOMPLETE ACTION DATES:

DATE ACTION

1 consistency of Pump 3 WEL certification
2 TMK changed?
3 also WUP? 84 3505-03 104 (Backside of transfer)
The attached shows our ag field boundaries. We do not currently have infrastructure to irrigate all fields (Pumps 3 & 8) but are working towards implementing this.

Surface water sources combine with the pump 3 water, so it is difficult to say how much of each is going where. The majority of the Pump 3 water is used on the Opaeula fields closest to the pump (right hand side of map) and only when there is not enough surface water. Pump 3's 1.5 mgd is an essential back-up during dry times. Pump 8 is the sole source for our fields in Paalaa.

We have a projected demand for the larger (2,400 acre) area of 6 mgd. This map reflects our long range footprint for this ag water system.

Imiola Lindsey, PE

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From: Charley.F.Ice@hawaii.gov [mailto:Charley.F.Ice@hawaii.gov]
Sent: Tuesday, June 29, 2010 1:15 PM
To: dan.nellis@dole.com; Imiola Lindsey
Subject: irrigation footprint

We are trying to complete your request to transfer water use permits 137 for Opaeula Pump 3 Battery and WUP #54 for Pump 8.
Because of multiple sources and changing uses, our need to make proper accounting of water use now requires establishing a footprint for each source's uses. While we have TMK maps showing vast swaths of agricultural land as "use" areas, nothing identifies the specific areas to be irrigated by these sources. Please provide a simple map showing the areas to be irrigated by these sources. It is understood that some areas to be considered eligible for use under these permits may be fallow at any one time. The information needed is the acreage to be irrigated and the boundaries within which irrigation will occur. Areas outside the boundaries may still fall within the same TMK tract, but not be the subject of this permit. Water use reporting to follow should indicate acreage irrigation and acreage fallowed, understanding that these numbers will change through the tenure of these permits.
Charley Ice  
Hydrologist  
Hawaii Water Commission  
1151 Punchbowl 227 Kalanimoku  
P.O. Box 621, Honolulu 96809  
(808) 587-0218  

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We are trying to complete your request to transfer water use permits 137 for Opaeula Pump 3 Battery and WUP #54 for Pump 8. Because of multiple sources and changing uses, our need to make proper accounting of water use now requires establishing a footprint for each source's uses. While we have TMK maps showing vast swaths of agricultural land as "use" areas, nothing identifies the specific areas to be irrigated by these sources. Please provide a simple map showing the areas to be irrigated by these sources. It is understood that some areas to be considered eligible for use under these permits may be fallow at any one time. The information needed is the acreage to be irrigated and the boundaries within which irrigation will occur. Areas outside the boundaries may still fall within the same TMK tract, but not be the subject of this permit. Water use reporting to follow should indicate acreage irrigation and acreage fallowed, understanding that these numbers will change through the tenure of these permits.

Charley Ice
Hydrologist
Hawaii Water Commission
1151 Punchbowl 227 Kahanimoku
P.O.Box 821, Honolulu 96809
(808) 587-0218
To Roy Hardy/DLNRIStateHiUS
cc Ryan R Imata/DLNRIStateHiUS@StateHiUS

Subject Re: Fw: WUP Issued to Waialua Sugar Company

I have it (to Roy already -- I caught a couple of typos already)
I'll take the transfer.

Roy Hardy/DLNRIStateHiUS

To Charley F Ice/DLNRIStateHiUS@StateHiUS, Ryan R Imata/DLNRIStateHiUS@StateHiUS
cc

Subject Fw: WUP Issued to Waialua Sugar Company

I'm still trying to figure out which of you I gave the WCR2 for Pump 3 B&C recently. Which ever one of you who got it please take care of this transfer as well. Thanks.

----- Forwarded by Roy Hardy/DLNRIStateHiUS on 05/20/2010 01:46 PM -----

To <Roy.Hardy@hawaii.gov>
cc "Thomas Kaeo Duarte" <kaduarte@ksbe.edu>

Subject RE: WUP Issued to Waialua Sugar Company

Roy, thanks again for your assistance. Please note, I was off by 4 years, the lease was surrendered April 1, 1999.

_________________________________________________________________
From: Roy.Hardy@hawaii.gov [mailto:Roy.Hardy@hawaii.gov]
Sent: Wed 5/19/2010 9:16 AM
To: Imiola Lindsey
Subject: Re: WUP Issued to Waialua Sugar Company

The transfer will be effectuated on todays date but for the record it should show when KSBE effectively took over in 1995.

<imlindse@ksbe.edu>

05/19/2010 09:06 AM
Please respond to imlindse@ksbe.edu
To
Roy.Hardy@hawaii.gov
cc
Subject
Re: WUP Issued to Waialua Sugar Company

Whoops.. Thought that was for you guys. Do we use today's date or the date the lease was handed back (sometime in 1995)? Thanks!

Sent via BlackBerry by AT&T

From: <Roy.Hardy@hawaii.gov>
Date: Wed, 19 May 2010 08:45:24 -1000
To: Imiola Lindsey<imlindse@ksbe.edu>
Cc: Thomas Kaeo Duarte<kaduarte@ksbe.edu>; <Ken.C.Kawahara@hawaii.gov>
Subject: RE: WUP Issued to Waialua Sugar Company

Thanks Imi. Do you know the effective date of transfer? (it's blank on the form).

Imiola Lindsey <imlindse@ksbe.edu>
05/19/2010 08:41 AM

To
<Ken.C.Kawahara@hawaii.gov>, <roy.hardy@hawaii.gov>
cc
"Thomas Kaeo Duarte" <kaduarte@ksbe.edu>
Subject
RE: WUP Issued to Waialua Sugar Company

Aloha Ken/Roy,

Please find the attached signed WUP for Pumps 3 & 8 (formerly WSCo). We can mail the original copy if needed. Thanks again for all your patience, we made every effort to get these signatures expeditiously.

Per Roy's request, we are also getting our monthly reporting in order for Pumps 3 & 8. Part of the well improvements was to install water level measurement devices at Pump 3 (this was not possible before). So in the coming month we will be getting you our pumpage, water level and chlorides data for Pumps 3, and pumpage/chlorides readings for Pump 8. We also might be able to get together the past pumpage data for both, if that is helpful.

Thanks again!
Imi
From: Imiola Lindsey
Sent: Tue 5/4/2010 8:19 AM
To: 'Ken.C.Kawahara@hawaii.gov'
Cc: Thomas Kaeo Duarte; Roy.Hardy@hawaii.gov
Subject: RE: WUP Issued to Waialua Sugar Company

Thanks Ken and Roy, this is very much appreciated.

The recent BWS request is tied to ag processing facilities we are proposing in Kawailoa, for crop washing using potable water (to satisfy food safety requirements by supermarkets and such). The allocations from pump 3 & 8 are consumed entirely by agricultural irrigation and the water is non-potable.

We'll inform our Haleiwa land manager about the water use reporting, and facilitate these reports to your staff.

Thanks again for a little more time on this

From: Ken.C.Kawahara@hawaii.gov [mailto:Ken.C.Kawahara@hawaii.gov]
Sent: Tuesday, May 04, 2010 7:33 AM
To: Imiola Lindsey
Cc: Thomas Kaeo Duarte; Roy.Hardy@hawaii.gov
Subject: Re: WUP Issued to Waialua Sugar Company

Aloha Imiloa,

Thank you for your email and additional information regarding the transfer. Although it should be done within 90 days, we will allow you a little more time (per your request below) on getting the signatures for the transfer. I am not sure if you are aware that Honolulu BWS is coming in for more water in the area. It is important that KS gets the water use reporting up to date (as well as the transfer) as we may have to start revoking any unused allocations.

Thanks again.
Ken

Imiola Lindsey <imlindse@ksbe.edu>

05/03/2010 10:21 AM
To
Aloha Ken,

I have just received your letter dated April 22, 2010, regarding the water use permit for Pumps 3 & 8, located on the KS Haleiwa lands (formerly leased to Waialua Sugar (WSC)).

After Roy identified our need for a current WUP in September, the KS land manager responsible for this area offered her assistance in getting the transfer form signed by an officer of WSC. And we want to assure you that we have not forgotten about this commitment, and the responsible land manager has been pursuing the signatures for this transfer for the last 8 months.

If we are able to get a WUP transfer form properly filed for pumps 3 & 8, will this be sufficient for transferring the allocation once held by WSC to Kamehameha Schools? If so, would you allow us just a few more weeks to obtain the necessary signatures, before we are required to pursue a new application for a WUP?

We would like you to note that these wells have been in continuous operation (no lapse in service) since the lease was surrendered back to KS and we took over operation of the plantation. The recent well work and communication with your office is all part of the extensive planning, design and construction activities KS is undertaking on the North Shore to repurpose those lands for a new era of agriculture following the demise of sugar. The sources in question have been essential to keeping these lands open to agriculture since the close of the plantation and they remain vital for local ag. As you know, they are invaluable for maintaining production, especially through the summer months when surface water is limited or at times non-existent. KS has recently put forth a statewide ag strategy, which will put even more emphasis on our farmable land in Haleiwa (around 2,200 acres, formerly in sugar, intended for diversified ag).

It has been great working with Roy to update the permits and documentation on these wells, and we look forward to continue working with CWRM as KS becomes a more active manager of former plantation lands and systems. We are committed to being a responsible water user, for compliance with the Water Code as well as our own organizational values. It is a complex and costly effort to try and create a new era of productive ag on former plantation lands, and we appreciate your patience and understanding.

Sincerely, Imiola

Imiola Lindsey, PE
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[attachment "WUP_signed2.pdf" deleted by Roy Hardy/DLNR/StateHiUS] <mailto:webmaster@ksbe.edu>

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WUP_signed.pdf
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
REQUEST TO TRANSFER WATER USE PERMIT

Instructions: Please print in ink or type and send completed application to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. The Commission may not accept incomplete applications. For assistance, call the Regulation Branch at 587-0225. For further information and updates to this application form, visit http://www.hawaii.gov/dlnr/cwrm.

CURRENT PERMIT HOLDER:

1. (a) PERMITTEE
   Firm/Name: Walailua Sugar Co
   Contact Person: Denni X. Nii
   Address: 1116 Whitmore Avenue, Wahiawa
   Phone: (808) 621-3200
   Fax: 808-621-7610
   E-mail: Denni.Nii@walailua.com

   Signature: [Signature]
   Date: 5/19/10

2. (a) PERMITTEE
   Firm/Name: Kamehameha Schools
   Contact Person: Imola Lindsey
   Address: 567 South King Street, Suite 200, Honolulu HI 96813
   Phone: (808) 523-6200
   Fax: (808) 541-5305
   E-mail: mlindsey@ksbe.edu

   Signature: [Signature]
   Date: 5/19/10

3. WATER USE PERMIT NO.: 137
   EFFECTIVE DATE OF TRANSFER: 4/1/99

4. WELL/STREAM DIVERSION NAME AND STATE NUMBER: Opaekaʻa Pump 3 Battery (State # 3505-001 to 020)

5. T.M.K. AT SOURCE: 6-2-010:001

6. END USE T.M.K.: 6-2-010:001

WUP TRANSFER REQUEST FORM (10/21/2008)
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
REQUEST TO TRANSFER WATER USE PERMIT
\[ \checkmark \text{Groundwater or} \ \square \text{Surface Water} \]

Instructions: Please print in ink or type and send completed application to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. The Commission may not accept incomplete applications. For assistance, call the Regulation Branch at 587-0225. For further information and updates to this application form, visit http://www.hawaii.gov/dlnr/cwrm.

CURRENT PERMIT HOLDER:
1. (a) PERMITTEE
   Firm/Name: Waialua Sugar Co
   Contact Person: Marcel N. Nulis
   Address: 1110 Whitmore Ave Waipahu
   Phone: 808-621-9320
   Fax: 808-621-9410
   E-mail: m.nulis@wisc.com

   (b) LANDOWNER OF SOURCE
   Firm/Name: Kamehameha Schools
   Contact Person: Imiola Lindsey
   Address: 567 South King Street, Suite 200, Honolulu HI 96813
   Phone: (808) 523-6200
   Fax: (808) 541-5305
   E-mail: limindse@ksbe.edu

   Signing below indicates that the signatories understand and have no objection to this water use permit transfer request.

   Signature: ___________________ Date: 5/19/10

   Signature: ___________________ Date: 5/19/10

PERMIT TO BE TRANSFERRED (CHECK ONE ONLY) \[ \checkmark \text{IN ENTIRETY or} \ \square \text{IN PART BY} \ \] GPD TO:
2. (a) PERMITTEE
   Firm/Name: Kamehameha Schools
   Contact Person: Imiola Lindsey
   Address: 567 South King Street, Suite 200, Honolulu HI 96813
   Phone: (808) 523-6200
   Fax: (808) 541-5305
   E-mail: limindse@ksbe.edu

   (b) LANDOWNER OF SOURCE
   Firm/Name: Kamehameha Schools
   Contact Person: Imiola Lindsey
   Address: 567 South King Street, Suite 200, Honolulu HI 96813
   Phone: (808) 523-6200
   Fax: (808) 541-5305
   E-mail: limindse@ksbe.edu

   Signing below indicates that the signatories swear that: 1) the conditions of use of the transferred permit including place, quantity, and purpose of the use remain the same. I also understand that a new water use permit will be issued to document this transfer and the old water use permit and number will be void and superseded.

   Signature: ___________________ Date: 5/19/10

   Signature: ___________________ Date: 5/19/10

WATER USE PERMIT TRANSFER INFORMATION
3. WATER USE PERMIT NO.: 54

4. WELL/STREAM DIVERSION NAME AND STATE NUMBER: Pump 8 (State # 3506-003 and 004)
5. T.M.K. AT SOURCE: 6-2-006:007

WUP TRANSFER REQUEST FORM (10/21/2008)
April 22, 2010

Mr. Imiola Lindsey
Kamehameha Schools
567 South King Street, Suite 200
Honolulu, HI 96813

Dear Mr. Lindsey:

Current Use of Ground Water from Waialua Aquifer System
Water Use Permits Issued to Waialua Sugar Company

We understand that ownership of wells formerly operated by Waialua Sugar Company have been transferred to Kamehameha Schools. There is also a need to transfer the water use permits (WUP) associated with these wells. At a meeting with Roy Hardy of our staff on September 24, 2009 regarding modification details of the Pump 3 battery, it was mentioned that WUP transfers would be required. We have not received any such transfer request to date.

Additionally, because the Water Code provides that four years of non-use is grounds for revocation of the allocation in the water use permit, we request your assistance in determining the proper disposition of these allocations. These are the WUPs and respective well numbers and names:

<table>
<thead>
<tr>
<th>WUP No.</th>
<th>Well No.</th>
<th>Well Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>054</td>
<td>3506-03 &amp;-04</td>
<td>Pump 8 battery</td>
</tr>
<tr>
<td>137</td>
<td>3505-01 to -20</td>
<td>Pump 3 battery</td>
</tr>
</tbody>
</table>

If you have limited reasonable and beneficial use, please identify the amount and purpose of use, using our water use permit application form. Following the normal review, we will issue you new permits accordingly. We will ask the Commission to revoke allocations with no current or planned use, making them available for other users. Additional amounts that may be required in the future may be applied for at any time using the water use application form.

If you have any questions, please contact Charley Ice of our staff at (808) 587-0218.

Sincerely,

KEN C. KAWAHARA, P.E.
Deputy Director

Attachment
ITEM 1  MINUTES OF THE MAY 19, 1993 MEETING

Unanimously approved as submitted (Cox/Nakata).

ITEM 2  OLD BUSINESS/REPORTS

Ms. Loui reported on two follow up items:

1) Guidelines for modification of the water use permits

Staff finds that Administrative Rules 171-23 are clear regarding changes that require modification. Therefore, it was felt that guidelines are not necessary.

2) Guidelines for Emergency permits

Still being worked on. Eventually, amendments to the Administrative Rules will be made to more clearly address emergency permits.

ITEM 3  WAIALUA SUGAR COMPANY, VOLUNTARY REDUCTION OF PERMITTED WATER USE IN THE WAIALUA GROUND WATER MANAGEMENT AREA, WAIALUA, OAHU

Mr. Sakoda submitted amended recommendations for the Commission review and action (see attached).

Mr. Cox had the following questions:

1) Are the statements regarding "dry years and "wet years" correct for that area and time?

Rainfall data provided by Climate Center was utilized, it was jointly determined that these were wet and dry years based on actual rainfall information.

2) In terms of the water level in the aquifer, what has happened during the periods noted?

The water level data for the Waialua Aquifer is not that good. No problems have been expressed. USGS is drilling in that area to get more data.

3) What length of time is being discussed in Waialua Sugar Company's (Waialua Sugar) statement: "We cannot afford to short ourselves of water. As we understand, we can exceed the permitted use during dry periods as may be required."

No specifics have been set, it would be on a case by case basis.

Mr. Nakata asked:

1) Why was there a discrepancy in the amount of pumpage?

Mr. Sakoda replied that Waialua Sugar was still in the process of converting from furrow to drip. During that time, fields lie fallow longer than normal.

2) What percentage of the acreage was under drip irrigation?
Milton Agadar, Waialua Sugar Irrigation Superintendent stated that approximately 90% is fed by drip irrigation from the Waialua Aquifer.

Mr. Martin provided testimony (see Commission file) urging the Commission to review all data presently available and consider imposing further allocation reductions. He also felt specific quantitative guidelines and protocols for administering dry period extractions need to be part of the State Water Resource Protection Plan and water use permit conditions.

Mr. Cox commented that unless more information was available he would be uncomfortable in trying set a time for the dry period because it would vary considerably from aquifer to aquifer. Mr. Sakoda agreed that a generalized guideline would be difficult to make because every situation would be different.

In regards to the word "voluntary", Mrs. Black suggested "agreement" because if there is no water, how could it be a "voluntary reduction". Mr. Sakoda stated that it is voluntary because the Water Code provides that a water user can voluntarily give up or reduce their allocation without going through the public hearing process.

Mr. Ing asked how the data was obtained for the graph and if all the active pumps were metered. Mr. Sakoda said data was submitted monthly by Waialua Sugar. Mr. Agadar responded that all the pumps are metered.

Mr. Ing asked why the 12-month moving average of pumping was used and if this was an industry practice. In Hawaii, 12-month moving averages have been used by the water industry.

Unanimously approved as amended (Cox/Nakata).

**ITEM 4**

**HOUSING FINANCE AND DEVELOPMENT CORPORATION, APPLICATION FOR A WELL CONSTRUCTION PERMIT, KEOPU-HFDC WELL 1 (WELL NO. 3957-03), NORTH KONA, HAWAII**

The following items were discussed:

1) The nearby Haseko Well is not being pumped but is proposed to be pumped at 700 gallons per minute.

2) This well would be required to follow the CWRM’s pump test protocol, which is a seven day test. The best data possible will be obtained for input into the Groundwater Model currently being developed jointly by USGS/CWRM.

3) If the HFDC wells interfere with the Haseko well, the Hawaii County BWS would not award the full amount of water commitments to the wells.

4) There have been mixed results of the testing of the high level wells. Some have stabilized quickly while others have not.

Mr. Martin expressed concerns regarding ceded lands, the effects on other wells due to a first come-first serve process, and requirements for a water license.

Mr. Tam said public lands are set aside by executive order for county and other state department uses. Setting aside or transferring water to a sub-agency of the state for public purposes is not a transfer to a private entity. Therefore, the use by the counties of state lands for providing municipal water supply does not require a license under the Land Board or the Commission.

Unanimously approved (Cox/Nakata).
State of Hawaii  
COMMISSION ON WATER RESOURCE MANAGEMENT  
Department of Land and Natural Resources  
Honolulu, Hawaii  
June 2, 1993  

Chairperson and Members  
Commission on Water Resource Management  
State of Hawaii  
Honolulu, Hawaii  

Gentlemen:

Additional Recommendations  
Waialua Sugar Company  
Voluntary Reduction of Permitted Water Use in the  
Waialua Aquifer System, Waialua Ground Water Management Area  
Waialua, Oahu  

RECOMMENDATIONS:

1. That the Commission accept Waialua Sugar Company’s voluntary reduction of permitted use in the Waialua Aquifer System, from 39.940 to 36.0 mgd, from the following sources:

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>WELL NUMBER</th>
<th>EXISTING ALLOCATION</th>
<th>PROPOSED ALLOCATION</th>
<th>REDUCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pump 3</td>
<td>3505-01 to 20</td>
<td>3.052 mgd</td>
<td>1.552 mgd</td>
<td>-1.500 mgd</td>
</tr>
<tr>
<td>Pump 7</td>
<td>3407-11, 12</td>
<td>3.750 mgd</td>
<td>2.930 mgd</td>
<td>-0.820 mgd</td>
</tr>
<tr>
<td>Pump 10</td>
<td>3306-01 to 12</td>
<td>6.620 mgd</td>
<td>5.000 mgd</td>
<td>-1.620 mgd</td>
</tr>
<tr>
<td>TOTALS</td>
<td></td>
<td>13.422 MGD</td>
<td>9.482 MGD</td>
<td>-3.940 MGD</td>
</tr>
</tbody>
</table>

2. That the Commission consider giving Waialua Sugar Company priority to reobtain its permitted level of water usage over any other application should more water become available in the future. This recommendation is based on Section 13-171-19(d) of the Water Code administrative rules which states:

"A permitted user of water in an existing water management area, with a continuous reduced water usage, shall be given priority to reobtain its permitted level of water usage over any other application; provided that the use remains the same and is reasonable and beneficial and water is available".
Chairperson and Members  
Commission on Water Resource Management  
State of Hawaii  
Honolulu, Hawaii  

June 2, 1993  

Gentlemen:  

Waialua Sugar Company  
Voluntary Reduction of Permitted Water Use in the  
Waialua Aquifer System, Waialua Ground Water Management Area  
Waialua, Oahu  

Background: Present authorized uses of ground water in the Waialua Aquifer System of the Waialua Ground Water Management Area (GWMA) total 43.114 mgd. The sustainable yield for the Waialua Aquifer System (formerly called the Waialua Subarea) was originally 60 mgd when the Board of Land and Natural Resources adopted the sustainable yield in July 1981. The Commission on Water Resource Management, in October 1991, accepted an updated table of sustainable yields for Oahu. Under the updated table, the sustainable yield for the Waialua Aquifer System was reduced from 60 mgd to 40 mgd. The new sustainable yield was formally adopted by the Commission on March 17, 1993. Authorized uses now exceed the sustainable yield by 3.114 mgd.

The Commission staff has reviewed the authorized uses versus the actual uses in the entire Waialua GWMA. Allocations in the Waialua Aquifer System are as follows:

<table>
<thead>
<tr>
<th>User Type</th>
<th>Allocated Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waialua Sugar Company</td>
<td>39.940 mgd</td>
</tr>
<tr>
<td>Honolulu BWS</td>
<td>2.730 mgd</td>
</tr>
<tr>
<td>Private Users</td>
<td>0.444 mgd</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>43.114 mgd</strong></td>
</tr>
</tbody>
</table>

Preliminary review of Waialua Sugar Company's pumpage data indicates that they have used less than 30 mgd of their 40 mgd allocation over the last five years (see attached graph). Water use by the Honolulu BWS and private users has not changed significantly.

Waialua Sugar Company calculated their irrigation requirements using the same methodology that Oahu Sugar Company used to determine their irrigation requirements in the Pearl Harbor area. Irrigation requirements were calculated for dry years (1983 - 1986) and wet years (1988 - 1991). Pumping required was calculated to be about 46 to 48 mgd for dry years and about 35 to 36 mgd for wet years.

Waialua Sugar Company has reviewed their water use over the past 20 years and, based on historical water use, conversion to drip irrigation, and other factors, has voluntarily reduced its permitted water use in the Waialua Aquifer System from 39.9 mgd to 36.0 mgd effective June 1, 1993. This voluntary reduction reduces the allocations in the Waialua Aquifer System to 39.174 mgd, which is less than the sustainable yield of 40 mgd, and allows an additional 0.826 mgd to be allocated.

In voluntarily reducing its allocation, Waialua Sugar Company states that they "want to be on record that sugar production is highly dependent upon water; without adequate water, yields will suffer. We cannot afford to short ourselves of water. As we understand, we can exceed the permitted use during dry periods as may be required" (See attached letter).
RECOMMENDATION:

That the Commission accept Waialua Sugar Company’s voluntary reduction of permitted use in the Waialua Aquifer System, from 39.940 to 36.0 mgd. The 3.94 mgd reduction will be taken from sources in the Waialua Aquifer System presently being determined by Waialua Sugar Company. Staff will be working with them to determine the source-by-source reductions and will bring the results to the Commission for approval.

Respectfully submitted,

RAE M. LOUI
Deputy Director

Attachment.

APPROVED FOR SUBMITTAL

KEITH W. AHUE, Chairperson
WAIALUA AQUIFER SYSTEM
WSCO. Use Vs. Allocation

WUP = 39.940 mgd
11.418 mgd

----- monthly use    -------- 12-mon mov ave

months

mgd
May 12, 1993

Ms. Rae Loui
Deputy Director
State Water Commission
P. O. Box 621
Honolulu, Hawaii 96809

Dear Ms. Loui:

We have had several meetings over the past months to discuss Waialua Sugar Company's permitted water use from the Waialua aquifer. Waialua Sugar has a permitted use of 39.9 million gallons per day. When you add the permitted use of the City Water Department, you have a combined use which is higher than the sustainable yield.

<table>
<thead>
<tr>
<th>Waialua Sugar Company</th>
<th>39.9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board of Water Supply</td>
<td>3.1</td>
</tr>
<tr>
<td></td>
<td>43.1</td>
</tr>
<tr>
<td>Total Sustainable Yield</td>
<td>40.0</td>
</tr>
<tr>
<td>Over Permitted Use</td>
<td>(3.1)</td>
</tr>
</tbody>
</table>

We have reviewed our water use over the past 20 years and while we have peaked at times over our permitted use, it appears we could reduce the permitted use given recent historical water use, conversion to drip irrigation and other factors.

Before going further, we want to be on record that sugar production is highly dependent upon water; without adequate water, yields will suffer. We cannot afford to short ourselves of water. As we understand, we can exceed the permitted use during dry periods as may be required.

Based on the above discussions and research into this matter, Waialua Sugar Company is voluntarily reducing its permitted water use in the Waialua aquifer from our current 39.9 million gallons per day to 36.0 million gallons per day effective June 1/93.

Sincerely,

Michael F. O'Brien
President
Dole Food Hawaii

cc: M. Agader
    J. A. Russell
    G. Yim
Chairperson and Members
Commission on Water Resource Management
State of Hawaii
Honolulu, Hawaii

Gentlemen:

Additional Recommendations
Waialua Sugar Company
Voluntary Reduction of Permitted Water Use in the
Waialua Aquifer System, Waialua Ground Water Management Area
Waialua, Oahu

RECOMMENDATIONS:

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<th>EXISTING ALLOCATION</th>
<th>PROPOSED ALLOCATION</th>
<th>REDUCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pump 3</td>
<td>3505-01 to 20</td>
<td>3.052 mgd</td>
<td>1.552 mgd</td>
<td>-1.500 mgd</td>
</tr>
<tr>
<td>Pump 7</td>
<td>3407-11, 12</td>
<td>3.750 mgd</td>
<td>2.930 mgd</td>
<td>-0.082 mgd</td>
</tr>
<tr>
<td>Pump 10</td>
<td>3306-01 to 12</td>
<td>6.620 mgd</td>
<td>5.000 mgd</td>
<td>-1.620 mgd</td>
</tr>
<tr>
<td>TOTALS</td>
<td></td>
<td>13.422 MGD</td>
<td>9.482 MGD</td>
<td>-3.940 MGD</td>
</tr>
</tbody>
</table>

2. That the Commission consider giving Waialua Sugar Company priority to reobtain its permitted level of water usage over any other application should more water become available in the future. This recommendation is based on Section 13-171-19(d) of the Water Code administrative rules which states:

"A permitted user of water in an existing water management area, with a continuous reduced water usage, shall be given priority to reobtain its permitted level of water usage over any other application; provided that the use remains the same and is reasonable and beneficial and water is available".
State of Hawaii
DEPARTMENT OF LAND AND NATURAL RESOURCES
Division of Water and Land Development
Honolulu, Hawaii

September 11, 1981

Chairman and Members
Board of Land and Natural Resources
State of Hawaii
Honolulu, Hawaii

Gentlemen:

Certification of Ground Water Withdrawals and Uses,
Wai' alua Ground Water Control Area, Oahu

The Waialua Ground Water Control Area was designated by the Board of Land and Natural Resources on February 27, 1981 under authority of Chapter 177, ERS, and Chapter 156 of Title 13, Administrative Rules entitled "Rules for the Control of Ground Water Use in the State of Hawaii". The Department's regulatory procedures provide for water users to declare their existing water uses within a ninety-day period which ended June 4, 1981 and allows the Board 180 days to certify the declared uses.

The recommended certification of total annual, average daily, and maximum daily withdrawals for individual wells and, or well fields is tabulated in the attachment, "Certification of Ground Water Withdrawals and Uses, Waialua Ground Water Control Area", for the Waialua, Mokuleia, and Kawailoa Subareas. A comparison of the recommended quantity for certification and the sustainable yield adopted by the Board on July 31, 1981 is tabulated below:

<table>
<thead>
<tr>
<th>Subarea</th>
<th>Sustainable Yield (mgd)</th>
<th>Recommended Certification (mgd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waialua</td>
<td>60</td>
<td>51.912</td>
</tr>
<tr>
<td>Mokuleia</td>
<td>20</td>
<td>7.753</td>
</tr>
<tr>
<td>Kawailoa</td>
<td>10</td>
<td>5.380</td>
</tr>
</tbody>
</table>

The remaining ground water supplies may be withdrawn by obtaining permits from the Board of Land and Natural Resources.

RECOMMENDATION:

That the Board certify the existing withdrawals and uses for each well tabulated on the attached "Certification of Ground Water Withdrawals and Uses, Waialua Ground Water Control Area" dated September 11, 1981, subject to any special conditions and applicable laws, rules and regulations.

Respectfully submitted,

ROBERT T. CHEUCK
Manager-Chief Engineer

APPROVED FOR SUBMITTAL:

SUSUMU ONO, Chairman

Approved by the Board of Land & Natural Resources at the meeting held on 9/1/81.

ITEM 5-5
## DEPARTMENT OF LAND AND NATURAL RESOURCES
### CERTIFICATION OF GROUND WATER WITHDRAWALS AND USES

**Waialua Ground Water Control Area**

<table>
<thead>
<tr>
<th>Source/Use</th>
<th>Source No.</th>
<th>Total Wells</th>
<th>Total Use</th>
<th>5-year Ave. Withdrawal (mgd)</th>
<th>Maximum Daily Use (mgd)</th>
<th>Total Annual Withdrawal (mgd)</th>
<th>Average Daily Withdrawal (mgd)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Waialua Subarea</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Waialua Sugar Co.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pump 1</td>
<td>3407-01, 02. . . .</td>
<td>5 Agr.</td>
<td>6.0</td>
<td>2.33 Agr.</td>
<td>6.0</td>
<td>650.65</td>
<td>2.33</td>
</tr>
<tr>
<td>Pump 2</td>
<td>3407-01 to 06. . . .</td>
<td>9 Agr./Dom.</td>
<td>10.0</td>
<td>4.37 Agr./Dom.</td>
<td>10.0</td>
<td>1,595.05*</td>
<td>4.37*</td>
</tr>
<tr>
<td>Pump 2A</td>
<td>3407-07. . . .</td>
<td>5 Agr./Dom.</td>
<td>7.0</td>
<td>4.45 Agr./Dom.</td>
<td>7.0</td>
<td>1,308.89</td>
<td>3.586</td>
</tr>
<tr>
<td>Pump 3</td>
<td>35-5-01 to 20</td>
<td>20 Agr./Dom.</td>
<td>7.0</td>
<td>3.16 Agr./Dom.</td>
<td>7.0</td>
<td>1,113.98</td>
<td>3.052</td>
</tr>
<tr>
<td>Pump 7</td>
<td>3407-11. . . .</td>
<td>4 Agr./Dom.</td>
<td>5.5</td>
<td>3.93 Agr./Dom.</td>
<td>5.5</td>
<td>1,43.75</td>
<td>3.75</td>
</tr>
<tr>
<td>Pump 8</td>
<td>3407-02</td>
<td>2 Agr./Dom.</td>
<td>3.0</td>
<td>1.66 Agr./Dom.</td>
<td>3.0</td>
<td>605.90*</td>
<td>1.66*</td>
</tr>
<tr>
<td>Pump 9</td>
<td>3407-02</td>
<td>1 Agr.</td>
<td>0.75</td>
<td>0.16 Agr.</td>
<td>0.75</td>
<td>58.4</td>
<td>0.16</td>
</tr>
<tr>
<td>Pump 10</td>
<td>3407-01 to 10</td>
<td>12 Agr.</td>
<td>12.0</td>
<td>6.62 Agr.</td>
<td>12.0</td>
<td>816.37</td>
<td>6.62</td>
</tr>
<tr>
<td>Pump 17</td>
<td>3407-01</td>
<td>1 Agr./Dom.</td>
<td>15.0</td>
<td>8.63 Agr./Dom.</td>
<td>15.0</td>
<td>2,992.37</td>
<td>8.198</td>
</tr>
<tr>
<td>Mill Pumps</td>
<td>3407-07 to 10, 18, 19, 20, 21</td>
<td>8 Agr.</td>
<td>10.0</td>
<td>4.63 Agr.</td>
<td>10.0</td>
<td>1,609.95</td>
<td>4.63</td>
</tr>
<tr>
<td>Pump 24</td>
<td>3407-02</td>
<td>1 Agr.</td>
<td>4.50</td>
<td>2.50 Agr.</td>
<td>4.50</td>
<td>96.70</td>
<td>2.50</td>
</tr>
<tr>
<td>Pump 25</td>
<td>3407-02</td>
<td>1 Agr.</td>
<td>4.50</td>
<td>2.50 Agr.</td>
<td>4.50</td>
<td>1,113.50</td>
<td>3.10</td>
</tr>
<tr>
<td>Pump 26</td>
<td>3407-02</td>
<td>1 Agr.</td>
<td>4.50</td>
<td>2.50 Agr.</td>
<td>4.50</td>
<td>1,007.40</td>
<td>2.76</td>
</tr>
<tr>
<td><strong>Subtotal (Waialua Sugar Co.)</strong></td>
<td></td>
<td>20</td>
<td>89.75</td>
<td>48.38</td>
<td>89.75</td>
<td></td>
<td>48.38</td>
</tr>
<tr>
<td><strong>Board of Water Supply</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waialua Wells</td>
<td>3405-01, 02</td>
<td>2 Mun.</td>
<td>4.32</td>
<td>1.73 Mun.</td>
<td>4.32</td>
<td>631.45</td>
<td>1.73</td>
</tr>
<tr>
<td><strong>Private Users</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kawaguchi, Howard</td>
<td>3406-07</td>
<td>1 Agr.</td>
<td>0.180</td>
<td>0.058 Agr.</td>
<td>0.180</td>
<td>21.17</td>
<td>0.058</td>
</tr>
<tr>
<td>Kawamata, Kengo</td>
<td>3406-03</td>
<td>1 Agr.</td>
<td>0.180</td>
<td>0.058 Agr.</td>
<td>0.180</td>
<td>36.3</td>
<td>0.1</td>
</tr>
<tr>
<td>Kinshiro, Shizuo</td>
<td>3406-06, 3407-02</td>
<td>2 Agr./Dom.</td>
<td>0.058 Agr.</td>
<td>2.006 Mun.</td>
<td>2.006</td>
<td>365.9</td>
<td>1.0</td>
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<td>Oceanic Properties</td>
<td>3406-08, 04</td>
<td>2 Mun.</td>
<td>2.006</td>
<td>0.144 Dth.</td>
<td>0.144</td>
<td>52.56</td>
<td>0.144</td>
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<td>Polynesian Shores</td>
<td>3406-06</td>
<td>1 Dth.</td>
<td>0.144</td>
<td>0.144 Dth.</td>
<td>0.144</td>
<td>52.56</td>
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<tr>
<td><strong>Subtotal (Private Users)</strong></td>
<td></td>
<td>1</td>
<td>2.36</td>
<td>0.282</td>
<td>2.36</td>
<td></td>
<td>1.502</td>
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<tr>
<td><strong>TOTAL - Waialua Subarea</strong></td>
<td></td>
<td>20</td>
<td>96.41</td>
<td>50.312</td>
<td>96.41</td>
<td>18,828.38</td>
<td>51.612</td>
</tr>
</tbody>
</table>

*For Agr./Dom. uses, specific quantities for each use are to be provided when additional information becomes available.*
### Waialua GWCA

#### DECLARED EXISTING USE

<table>
<thead>
<tr>
<th>User/Source</th>
<th>Source</th>
<th>Total Wells</th>
<th>Source Use</th>
<th>5-yr. Ave. Withdrawal</th>
<th>Preserved Use</th>
<th>Average Daily Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>(mgd)</td>
<td>(mgd)</td>
<td>(mgd)</td>
<td>(mgd)</td>
</tr>
<tr>
<td><strong>MOKULEIA Subarea</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Waialua Sugar Co.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Pump 5</td>
<td>Agr.</td>
<td>8</td>
<td>8.5</td>
<td>2.55</td>
<td>Agr. 7.0</td>
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<td>Pump 11</td>
<td>Agr./Dom.</td>
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<td>1.5</td>
<td>0.53</td>
<td>Agr./Dom. 1.5</td>
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<td><strong>Subtotal (Waialua Sugar Co.)</strong></td>
<td></td>
<td>9</td>
<td>10.0</td>
<td>3.08</td>
<td>8.5</td>
<td>3.08</td>
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<tr>
<td><strong>Private Users</strong></td>
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<td></td>
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<td></td>
<td></td>
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<tr>
<td>Army - Kailua</td>
<td>Dom.</td>
<td>1</td>
<td>0.720</td>
<td>No data</td>
<td>Dom. 0.720</td>
<td>20.06</td>
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<tr>
<td>Air Force - Kauai Mtn.</td>
<td>Dom.</td>
<td>1</td>
<td>0.096</td>
<td>0.018</td>
<td>Dom. 0.096</td>
<td>6.47</td>
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<tr>
<td>Mokuole Assoc.</td>
<td>Dom.</td>
<td>1</td>
<td>No data</td>
<td>No data</td>
<td>Dom. -0-</td>
<td>-0-</td>
</tr>
<tr>
<td>Mokuole Homesteads</td>
<td>Nat. flow</td>
<td>1</td>
<td>0.5</td>
<td>Agr./Dom. 0.5</td>
<td>102.5*</td>
<td>0.5*</td>
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<tr>
<td>Pump 10-03</td>
<td>Agr./Dom.</td>
<td>1</td>
<td>1.512</td>
<td>1.5</td>
<td>Agr./Dom. 1.5</td>
<td>1.5*</td>
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<tr>
<td>Pump 10-05</td>
<td>Agr. Nat. flow</td>
<td>1</td>
<td>1.5</td>
<td>To be sealed</td>
<td>-0-</td>
<td>-0-</td>
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<td>Pump 10-01</td>
<td>Agr./Dom.</td>
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<td>1.5</td>
<td>No data</td>
<td>Agr./Dom. 1.5</td>
<td>1.05</td>
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<td>Pump 10-02</td>
<td>Agr./Dom.</td>
<td>1</td>
<td>1.5</td>
<td>No data</td>
<td>Agr./Dom. 1.5</td>
<td>1.05</td>
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<tr>
<td><strong>Subtotal (Private Users)</strong></td>
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<td>8</td>
<td>5.318</td>
<td>2.118</td>
<td>5.806</td>
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<td><strong>TOTAL - Mokuole Subarea</strong></td>
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<td>17</td>
<td>15.318</td>
<td>5.198</td>
<td>15.106</td>
<td>7.353</td>
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<td><strong>KAMEAIIOA Subarea</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waialua Sugar Co.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pump 4</td>
<td>Agr.</td>
<td>9</td>
<td>14.0</td>
<td>5.53</td>
<td>Agr. 14.0</td>
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<td><strong>Private User</strong></td>
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<td></td>
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<tr>
<td>Aleawow Gold Farm</td>
<td>Ind.</td>
<td>1</td>
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<td>0.420</td>
<td>Ind. 0.648</td>
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<td><strong>TOTAL - Kamea Subarea</strong></td>
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<td>14.648</td>
<td>5.96</td>
<td>14.648</td>
<td>2.175.40</td>
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</tbody>
</table>

*For Agr./Dom. uses, specific quantities for each use are to be prorated when additional information becomes available.*

C10
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
MONTHLY GROUND WATER USE REPORT

FEBRUARY, 2012

Name: ________________________________

Company: ________________________________

Address: ________________________________

Telephone No.: ___________________ Fax No.: ___________________

Report Month: ___________________ Year: ___________________

INSTRUCTIONS: Please TYPE OR PRINT CLEARLY. Complete this form to report total monthly ground water use, and, if required, other information from each of your well sources. Mail to: Commission on Water Resource Management, P.O. Box 621, Honolulu, HI 96809. For assistance, please call (808) 587-0265.

<table>
<thead>
<tr>
<th>State Well No.</th>
<th>Well Name</th>
<th>Period Begin Date (mm/dd/y)</th>
<th>Period End Date (mm/dd/y)</th>
<th>Quantity Pumped (gallons)</th>
<th>Method of Measurement*</th>
<th>Chloride (mg/l)</th>
<th>Temp (°F)</th>
<th>Non-Pumping Water Level (ft above msl)**</th>
</tr>
</thead>
<tbody>
<tr>
<td>2658-10</td>
<td>OPAE IIIA PUMP 3 BATTERY</td>
<td>1-31-12</td>
<td>2-29-12</td>
<td>15,750,200</td>
<td>Flowmeter</td>
<td>40</td>
<td>72</td>
<td>10.18</td>
</tr>
<tr>
<td>2658-20</td>
<td>OPAE IIIA PUMP 8 BATTERY</td>
<td>1-31-12</td>
<td>2-29-12</td>
<td>8,366,600</td>
<td>Flowmeter</td>
<td>80</td>
<td>80</td>
<td>10.2</td>
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</tbody>
</table>

* Flow meter, electrical consumption, weir or flume, not metered (estimated).

** Measurement should be taken while pump is NOT running just prior to a pumping cycle; if measurement is taken while pump is running, please indicate so.

Other comments or additional information (e.g., date and method of chloride measurement, how pumpage amounts are estimated, etc.):

Submitted by (print): SUD KENT (3-8-12)  
Title: ________________________________

Signature: ________________________________  
Date: ________________________________

GWUR-MON FORM (06/10/2004)
WATER USE PERMIT NO. 137

This report has been prepared in accordance with 13-171-22(b) of the Hawaii Revised Statutes requiring a 20-year review of issued water use permits to determine permit compliance. Following is a summary of permit information, site characteristics, methodology, findings, and recommendations for this State permit file.

Permit Information

<table>
<thead>
<tr>
<th>Water User:</th>
<th>Kamehameha Schools 567 S. King St., Suite 200 Honolulu, HI 96813</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landowner of Source:</td>
<td>Kamehameha Schools 567 S. King St., Suite 200 Honolulu, HI 96813</td>
</tr>
<tr>
<td>Permitted Withdrawal Rate:</td>
<td>1.552 mgd (Based upon a 12-month moving average)</td>
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<tr>
<td>Water Management Area:</td>
<td>Waialua</td>
</tr>
<tr>
<td>Island:</td>
<td>Oahu</td>
</tr>
<tr>
<td>Aquifer Sector/System:</td>
<td>North/Waialua</td>
</tr>
<tr>
<td>System Sustainable Yield:</td>
<td>40 mgd</td>
</tr>
<tr>
<td>Water Type:</td>
<td>Fresh</td>
</tr>
<tr>
<td>Original CWRM Date:</td>
<td>June 2nd, 1993</td>
</tr>
<tr>
<td>Standard Conditions:</td>
<td>N/A</td>
</tr>
<tr>
<td>Special Conditions:</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Water Source

| State Well Number(s):            | 3505-01 thru 3505-20                                             |
| Well Name:                       | Pump #3                                                          |
| Water Source TMK Number(s):      | 1st Division, 6-2-010:001                                         |
| State Land Use Classification(s):| Agriculture/Conservation                                       |
| County Zoning Classification(s): | AG-1/P-1                                                        |
| Geographical Coordinates:        | Latitude 21° 34' 57.6” North                                   |
|                                 | Longitude 158° 05' 36.1” West                                   |

End Use

| End Use TMK Number(s):           | 1st Division, 6-2-010:001, 6-2-009:001, 6-1-005:019              |
| State Land Use Classification(s):| Agriculture/Conservation                                       |
| County Zoning Classification(s): | AG-1/P-1                                                        |
| Beneficial Use Explanation:      | Use for diversified agriculture                                 |
Background Information

State Well Nos. 3505-01 thru 3505-20 were used by Waialua Sugar until operations were ceased in the mid-1990's. The current landowner, Kamehameha Schools (formerly Bishop Estate), is now the entity that maintains and is responsible for the existing water system. However, no permit transfer has been made to reflect this change. As such, the transfer process should be initiated to list Kamehameha Schools as both the current permittee and landowner for Water Use Permit 137.

Water Use Permit 137 was approved during the June 2nd, 1993 Commission on Water Resource Management meeting. There are no water use or salinity records on file for the Pump 3 battery. During the research phase of this project, the file for State Well Nos. 3505-01 thru 3505-20 could not be located. As such, certain permit information, including the standard and special conditions associated with WUP 137, are not available. A complete list of all standard and special conditions is given in the permit file.

Field Investigation Information

Contact: Kaeo Duarte
Site Address: Pump #3
Haleiwa, HI 96712

Brown and Caldwell conducted a field investigation on September 5th, 2008 from 9:00 a.m. until 11:00 a.m. with Ms. Kapu Smith, who is an associate of Mr. Kaeo Duarte. During this time, type of water usage was verified, GPS coordinates of well head(s) were recorded, flow meter installation and functionality were documented, and property TMK information was verified. The wellhead, its related appurtenances, and water usage area were visually inspected to assess compliance with permit conditions. Visual inspection of water loss/waste was limited to outdoor areas within the usage boundary. The physical location of this site is Mauka of Joseph Leong Highway, adjacent to the old cane haul road that runs through Haleiwa town. Reference the TMK and GIS maps in the permit file for a visual representation of the site.

Summary of Findings for Water Use Permit No. 137

The Pump #3 battery, consisting of State Well Nos. 3505-01 thru 3505-20, is located on TMK parcel 6-2-010:001 at 21° 34' 57.6" N, 158° 05' 36.1" W, with a real time accuracy of ±25 feet. The pump house a large, 50-ft deep sunken chamber enclosed within a warehouse sized building. Four tunnels penetrate the chamber walls horizontally outwards for approximately 30-feet. At
the end of each tunnel, several lines branch of to the different well heads. Water flows in an artesian manner from the shafts into the distribution tunnels. Pumps located within the chamber draw water from the channels and distribute it to the end users. System controls and a functional flowmeter are located in the sunken chamber, adjacent to the well pump.

The system in place is a retrofitted version of a much older pump and piping configuration. A vertically mounted pump motor draws water from four channels and conveys the water through a large reducer fitting into the much larger distribution line that is still in place from the older system. Water is conveyed through this 2-ft diameter pipe from the pump house at the bottom of a gulch, to the end use fields on higher ground. Within the fields, a combination of underground piping and above ground irrigation ditches delivers the water to the appropriate storage reservoirs or end use fields. A second flowmeter is located on the central line in the field, prior to the water being distributed.

Water from the well is ultimately used for diversified agriculture (corn, tuberose, papaya) on TMK parcels 6-2-010:001, 6-2-009:001, and 6-1-005:019, which are all leased by Kamehameha Schools to various organizations.

Since no conditions could be located during the research phase of this project, it is difficult to ascertain the extent of permit compliance. However, the following are a list of standard condition(s) that the permittee could be in non-compliance with:

10. An approved flowmeter must be installed to measure monthly withdrawals and a month record of withdrawals, salinity, temperature, and pumping times must be kept and reported to the Commission on Water Resource Management on forms provided by the Commission on a monthly basis.

12. A permit may be transferred, in whole or in part, from the permittee to another, if:
   a. The conditions of use of the permit, including, but not limited to, place, quantity, and purpose of use, remain the same; and
   b. The Commission is informed of the transfer within ninety days.

Failure to inform the department of the transfer invalidates the transfer and constitutes a ground for revocation of the permit. A transfer, which involves a change in any condition of the permit, including a change in use covered in HRS § 174C-57, is also invalid and constitutes a ground for revocation.

Before any action is taken, conditions for this permit should be located. It is worth noting, however, that regardless of whether or not the permittee is in compliance with their conditions, non-reporting of water use is a direct violation of the reporting requirements set forth in the State Water Code.
Recommendations

- Address the following discrepancies between the Commission’s electronic database and actual field investigation findings:
  - Permittee and landowner names and addresses
  - Change permittee contact to Kaeo Duarte at (808) 534-3866 (kaduarte@ksbe.edu)
  - TMK parcel information
  - Beneficial use description
  - State land use and county zoning classifications.
- Address potential violation of Standard Condition (10) regarding non-reporting of water use and salinity levels.
- Address potential violation of Standard Condition (12) regarding use of water from the Pump #3 well battery without having transferred this water use permit from Waialua Sugar to Kamehameha Schools.

Imiola Lindsey - ilindsey@ksbe.edu
<table>
<thead>
<tr>
<th>Well ID</th>
<th>Well Name</th>
<th>WUP MGD</th>
<th>Beginning</th>
<th>Ending</th>
<th>Compute 12-Month Moving Average</th>
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</thead>
<tbody>
<tr>
<td>3-3505-001</td>
<td>Opelula P3 Battery</td>
<td>1.552</td>
<td>1/1/2004</td>
<td>6/30/2009</td>
<td></td>
</tr>
</tbody>
</table>

**12 Month Moving Average**

![Graph showing 12 month moving average](image_url)
20-Year Water Use Permit Review
Water Use Permit No. 137

APPENDIX

Field Investigation Photographs
Figure 1 – Pump house & well chamber

Figure 2 – Typical tunnel fed by artesian flow from well shafts
Figure 3 – Well pumps/motors

Figure 4 – System controls
Figure 5 – System flowmeter in the pump house

Figure 6 – Main distribution line daylight location
Figure 7 – Typical storage reservoir and end use location

Figure 8 – Typical end use location
Figure 9 - Typical irrigation ditch system
Water Use Permit Survey

(Please complete one survey form for each WUP)

WUP Number: 137
Well Number(s): 3505-01 thru 20

Contact Information (of the person who will be present at site visit):
Name: Kaeo Duarte
Phone (for phone interview): 534-3866  Fax: 808-523-6374
Email: baduarte@hscle.edu
Best time to reach for phone interview: 10am

Property Information (of the water use/well location):
Address:__________________________________________________________
City: ________________________________________________ Zip:____________
Well Location TMK (list all if multiple wells present): 6-2-010:001
Water Use TMK (list all if used on multiple lots): 6-2-010:001; 6-2-009:001; 6-1-005:019

Water Use/Well Information:
Is the water source currently in use? Yes ☒ No ☐
If no, please explain: ____________________________________________
What are you currently using the water for? (example: "Use for 45 acres of diversified agriculture and 3 residences"): Various diversified ag: nursery plants, fruits, vegetables, sweet corn, cut flowers

Is a flow meter installed and working properly? Yes ☐ No ☒
If no, please explain: We are in a state of transition from former lessee. Dale, we are actively working to repair the system.
Do you submit monthly water use reports to the State? Yes ☐ No ☒
If no, please explain: see above

Field Investigations:
A representative from Brown and Caldwell will be visiting wells in your area over the next several months between the times of 9:00 am and 5:00 pm. Each site investigation will take approximately 1-2 hours. Please indicate up to three potential days of the week and availability times for an on-site inspection of the well location and verification of water use compliance. The permit holder must provide Brown and Caldwell with at least five (5) working days notice of the need to reschedule.

Option #1 Date (M-F):___________ Time: 9:00 am ☐ 12:00 pm ☐ 3:00 pm ☐
Option #2 Date (M-F):___________ Time: 9:00 am ☐ 12:00 pm ☐ 3:00 pm ☐
Option #3 Date (M-F):___________ Time: 9:00 am ☐ 12:00 pm ☐ 3:00 pm ☐

Once this survey is returned, a Brown and Caldwell representative will be contacting you to conduct a phone interview and finalize the exact date and time of your field investigation. Please fax/mail completed surveys by December 12th, 2007 and direct any questions related to this survey to Mr. Milo Smith of Brown and Caldwell at:
1099 Alakea Street, Suite #2400
Honolulu, HI 96813
Tel: (808) 203-2661
Fax: (808) 533-0226
mcsmith@brwncald.com

For Official Use Only
Received: 6/22/08  Information Updated: 6/22/08  Phone Interview Complete: 6/26/08
Notes/Comments: __________________________________________________________
Phone Interview

Contact Name: Kaeo Duarte

Well Number(s): 3505-01 thru 20

Phone Number: 531-3606

Attempt #1: Date/Time: 4/26/06 (9:39) Result: Reached

Attempt #2: Date/Time: N/A Result: N/A

Well Location TMK(s): 6-2-010:001

Water Use TMK(s): 6-2-010:001, 6-2-000:001, 6-1-005:01A

Water Source Address: Pump * 3

City: Hālawa Zip Code: 96712

Currently using water source? Yes ☑ No ☐

Notes/Comments: Use for diversified ag

How often is the water source being used? Daily ☑ Weekly ☐ Monthly ☐

Notes/Comments:

How long have you been using this water source?: N/A

Has there been any rezoning of the water source/water use properties? Yes ☐ No ☑

Have you reported the rezoning to the State? Yes ☐ No ☑ N/A ☑

If no, explain:

Scheduled field investigation day/time: 4/15/06 @ 9:00 a.m.

Notes (Special directions, site conditions, potential hazards, general notes, etc.):

Meet w/Kapu Smith at parking lot next to core haul road.

Kapu Smith
372-2976

Comments To Make:

• Although we prefer that you do not change your scheduled field investigation time, if you require a reschedule, you must provide Brown and Caldwell with at least five (5) working days notice of the need to reschedule.

• A representative from Brown & Caldwell will be making a reminder phone call to you sometime during the week prior to your scheduled field investigation.

• It is very important that you provide access to the site at the day and time agreed upon. Due to a very tight schedule, if you fail to provide access at the agreed upon time and/or do not reschedule with at least a five (5) working day notice, a makeup date will not be allowed.

• If for some reason you don’t know where your well head is located, it would be a good idea to locate it prior to your field investigation to help make the visit go quickly and smoothly.

Interviewed By: M.S. Date: 4/26/06 Time: 9:30 a.m.
Field Investigation Checklist

WUP Number: 137                   Well Number(s): 3505-01 thru-20

Water Source
Well Location TMK(s): 6-7-010.001
Well Head GPS Coordinates: Latitude: 21° 34' 57.6" N Longitude: 156°05'36.1" W
Well Type: Battery, Drilled

Currently using water source? Yes ☑ No ☐
Notes/Comments:

Is there a flow meter installed? Yes ☑ No ☐
Is the flow meter operational? Yes ☑ No ☐
Notes/Comments: 2 FMs - one at source, one in-line at the field

Water Use
Water Use TMK(s): 6-7-010.001, 6-7-009.100, 6-1-005.019

What is the water being used for? Diversified agriculture (corn, tuberose, papaya)

Is the water being used within the permitted boundaries? Yes ☐ No ☑
If no, explain: N/A - no boundaries given on permit file

Is there any observed wasting of water or water loss? Yes ☐ No ☑
If no, explain:

Are the permit conditions being complied with? Yes ☐ No ☑
If no, explain: No water use/salinity (If there are conditions of this permit)

Other
Photographs of: Water Source ☑ Water Meter ☑ Usage Area ☐ Pump/Motor ☑

General Notes/Comments:

Water drawn, pumped up the hill and into distribution system for the leasee's diversified agriculture purposes.

Investigated By: ___________________________ Date: 9/6/09 Time: 9:00 a.m.
Standard Conditions List

1. The water described in this water use permit may only be taken from the location described and used for the reasonable beneficial use described at the location described above. Reasonable beneficial uses means “the use of water in such a quantity as is necessary for economic and efficient utilization, which is both reasonable and consistent with State and County land use plans and the public interest.” (HRS § 174C-3)

2. The right to use ground water is a shared use right.

3. The water use must at all times meet the requirements set forth in HRS § 174C-49(a), which means that it:
   a. Can be accommodated with the available water source;
   b. Is a reasonable-beneficial use as defined in HRS § 174C-3;
   c. Will not interfere with any existing legal use of water;
   d. Is consistent with the public interest;
   e. Is consistent with State and County general plans and land use designations;
   f. Is consistent with County land use plans and policies; and
   g. Will not interfere with the rights of the Department of Hawaiian Home Lands as provided in Section 221 of the Hawaiian Homes Commission Act and HRS § 174C-101(a).

4. The ground-water use here must not interfere with surface or other ground-water rights or reservations.

5. The ground-water use here must not interfere with interim or permanent instream flow standards. If it does, then:
   a. A separate water use permit for surface water must be obtained in the case an area is also designated as a surface water management area;
   b. The interim or permanent instream flow standard, as applicable, must be amended.

6. The water use authorized here is subject to the requirements of the Hawaiian Homes Commission Act, as amended, if applicable.

7. The water use permit application and submittal, as amended, approved by the Commission at its <Insert Date> meeting are incorporated into this permit by reference.

8. Any modification of the permit terms, conditions, or uses may only be made with the express written consent of the Commission.

Variations of Standard Condition (8) are as follows:
   i. Modification of any permit condition shall be approved by the Commission. Modification of any permit condition without notification may result in the revocation of the water use permit.
9. This permit may be modified by the Commission and the amount of water initially granted to the permittee may be reduced if the Commission determines it is necessary to:
   a. Protect the water sources (quantity or quality);
   b. Meet other legal obligations including other correlative rights;
   c. Insure adequate conservation measures;
   d. Require efficiency of water uses;
   e. Reserve water for future uses, provided that all legal existing uses of water as of June, 1987 shall be protected;
   f. Meet legal obligations to the Department of Hawaiian Home Lands, if applicable; or
   g. Carry out such other necessary and proper exercise of the State’s and the Commission’s police powers under law as may be required.

Prior to any reduction, the Commission shall give notice of its proposed action to the permittee and provide the permittee an opportunity to be heard.

10. An approved flowmeter(s) must be installed to measure monthly withdrawals and a monthly record of withdrawals, salinity, temperature, and pumping times must be kept and reported to the Commission on Water Resource Management on forms provided by the Commission on a monthly basis (attached).

Variations of Standard Condition (10) are as follows:
   i. The applicant shall keep monthly pumpage estimates to be submitted annually to the Commission.
   ii. An approved flowmeter(s) need not be installed to measure monthly withdrawals and a monthly record of withdrawals, salinity, temperature, and pumping times must be kept and reported to the Commission on Water Resource Management on forms provided by the Commission on a yearly basis (attached).
   iii. An approved flowmeter(s) must be installed to measure withdrawals and a monthly record of withdrawals, water-levels, salinity, and temperature must be kept and reported to the Commission on a monthly basis in accordance with the Commission’s September 16, 1992 action on reporting requirements.
   iv. Approved flowmeters must be installed to measure monthly withdrawals and a monthly record of withdrawals must be kept and reported to the Commission on Water Resource Management on a monthly basis.
   v. An approved flowmeter(s) must be installed to measure monthly withdrawals and a monthly record of withdrawals, salinity, temperature, and pumping times must be kept and reported to the Commission on Water Resource Management on forms provided by the Commission on a quarterly/yearly basis (attached).
   vi. An approved flowmeter shall be installed to measure water withdrawals
   vii. An approved flowmeter(s) must be installed to measure withdrawals; and a record of the withdrawals must be kept and reported to the Department of
Land and Natural Resources, Division of Water and Land Development, P.O. Box 373, Honolulu, HI 96809, on a **monthly** basis.

viii. Although not stated as a condition of the permit § 13-168-7 HAR requires you to keep a record of your **monthly** total pumpage, water level, salinity, and water temperature. This information must be submitted to the Commission on a regular monthly basis using the enclosed water use report form.

ix. An approved flowmeter shall be installed and the withdrawal from Well 1851-73 shall be recorded and reported to DLNR on a **monthly** basis by the owner and/or operator of the well.

x. The withdrawals from these wells shall be recorded and reported to the DLNR on a **monthly** basis by the BWS.

xi. The applicant shall provide and maintain an approved meter or other appropriate device or means for measuring and reporting water usage on a **monthly** basis.

xii. The applicant shall provide and maintain an approved meter or other appropriate device or means for measuring and reporting total water usage. Water usage shall be measured on a **monthly** basis and reported to the Commission.

xiii. The applicant shall provide and maintain an approved meter or other appropriate device or means for measuring and reporting total water usage. Water usage shall be measured on a **monthly** basis and reported to the Commission along with water level and salinity measurements.

11. This permit shall be subject to the Commission’s periodic review of the <Aquifer> Aquifer System’s sustainable yield. The amount of water authorized by this permit may be reduced by the Commission if the sustainable yield of the <Aquifer> Aquifer System, or relevant modified aquifer(s), is reduced.

12. A permit may be transferred, in whole or in part, from the permittee to another, if:
   a. The conditions of use of the permit, including, but not limited to, place, quantity, and purpose of use, remain the same; and
   b. The Commission is informed of the transfer within ninety days.

   Failure to inform the department of the transfer invalidates the transfer and constitutes a ground for revocation of the permit. A transfer, which involves a change in any condition of the permit, including a change in use covered in HRS § 174C-57, is also invalid and constitutes a ground for revocation.

13. The uses(s) authorized by law and by this permit do not constitute ownership rights.

14. The permittee shall request modification of the permit as necessary to comply with all applicable laws, rules, and ordinances that will affect the permittee’s water use.

15. The permittee understands that under HRS § 174C-58(4), that partial or total nonuse, for reasons other than conservations, of the water allowed by this permit for a period of four (4) continuous years or more may result in a permanent revocation as to the amount of water not in use. The Commission and the permittee may enter
into a written agreement that, for reasons satisfactory to the Commission, any period of nonuse may not apply towards the four-year period. Any period of nonuse which is caused by a declaration of water shortage pursuant to section HRS § 174C-62 shall not apply towards the four-year period or forfeiture.

16. The permittee shall prepare and submit a water shortage plan within 30 days of the issuance of this permit as required by HAR § 13-171-42(c). The permittee's water shortage plan shall identify what the permittee is willing to do should the Commission declare a water shortage in the Ground-Water Management Area.

17. The water use permit shall be subject to the Commission's establishment of instream standards and policies relating to the Stream Protection and Management (SPAM) program, as well as legislative mandates to protect stream resources.

18. The permittee understands that any willful violation of any of the above conditions or any provisions of HRS § 174C or HAR § 13-171 may result in the suspension or revocation of this permit.

19. Special conditions in the attached cover transmittal letter or attached exhibits are incorporated herein by reference.

20. If the ground-water source does not presently exist, the new well shall be completed, i.e. able to withdraw water for the proposed use on a regular basis, within twenty-four (24) months from the date the water use permit is approved.

Variations of Standard Condition (20) are as follows:

i. The permit may be revoked if work is not started within six months of the date of issuance or if work is suspended or abandoned for six months. The work proposed in the permit application shall be completed within two years from the date of permit issuance.

21. This permit may not be transferred or the use rights granted by this permit sold or in any other way alienated. Pursuant to HRS § 174C-59 and the requirements of Chapter 174C, the Commission on Water Resource Management has the authority to allow the transfer of the permit and the use rights granted by this permit in a manner consistent with HRS § 174C-59. Any such transfer shall only occur with the Commission's prior express written approval. Any sale, assignment, lease, alienation, or other transfer of any interest in this permit shall be void.

22. The water use permit granted shall be an interim water use permit, pursuant to HRS § 174C-50. The final determination of the water use quantity shall be made within five (5) years of the filing of the application to continue the existing use.

23. The water use permit shall be issued only after agricultural review.

24. That scheduled adjustments to Oahu Sugar Co. permitted use shall be initiated upon discontinuance of agricultural uses.
25. The issuance of this permit was approved by the Commission on Water Resource Management at its meeting on <Insert Date>.

26. The permit shall be subject to the review by the Attorney General.

27. The permit holder may be required to relinquish this permit at any time or specified time after issuance to the Board of Land and Natural Resources in accordance with Chapter 166 of Title 13.

28. The applicant shall obtain the necessary land acquisition documents from the Hawaii Housing Authority.
Special Conditions List

1. Should an alternate permanent source of water be found for this use, then the Commission reserves the right to revoke this permit, after a hearing.

2. In the event that the tax map key at the location of the water use is changed, the permittee shall notify the Commission in writing of the tax map key change within thirty (30) days after the permittee receives notice of the tax map key change.

3. The applicant shall contact the Environmental Management Division, State Department of Health, at 586-4304, concerning “GUIDELINES APPLICABLE TO GOLF COURSES IN HAWAII” date <Insert Date & Version #>.

4. Standard Condition 10 is emphasized, to report consumption on a regular basis.

5. The applicant may continue this existing use of ground water within the limits approved by the Commission, and the actual issuance of the interim permit shall not be a reason to interrupt this existing use.

6. This interim water use permit shall cease to become interim and shall be subject to HRS § 174C-55 upon administrative review of the quantity within five (5) years, provided that all conditions of the use (including the review of the quantity which shall not be greater than the amount initially granted) remain the same. Enforcement of the allocation limit shall be stayed pending staff’s review and issuance of a permanent water use permit.

7. As-built drawings of the well and pump, and a complete pumping test record shall be submitted within sixty (60) days.

8. In the event the pump tests show that aquifer boundary conditions do not support the requested withdrawals, the Commission reserves the right to amend this permit, after a hearing, to a level that is supported by the pump tests.

9. The existing use may be continued within the levels approved by the Commission, and the actual issuance of the permit document shall not be a reason to interrupt the approved level of use.

10. The filing of an application by Kukui, Inc. for a new or modified water use permit for the Kualapuu Aquifer in excess of 2.0 mgd (total system withdrawal) shall be just cause for re-consideration of this interim permit by the Commission.

11. Upon completion of a new transmission line for the transport of water use by Well #17, the permit shall be modified to reduce the allocation amount by the additional 79,220 gallons per day allocated for use of the Molokai Irrigation System.

12. Within six (6) months from the date of approval of a water use permit for the well, the applicant shall conduct a feasibility study and submit a report describing
alternative sources of nonpotable water for irrigation uses at the resort area. It is suggested that the developer consider use of dual lines in the subdivisions so that effluent may be used in the existing reuse system. Another consideration is the development of brackish water wells in the Kaluakoi Aquifer system for mixing with the effluent generated at the resort.

13. Within six (6) months from the date of approval of a water use permit for the well, the application shall evaluate the filter back discharges into Kakaako Gulch to determine if excessive preventable waste is occurring and identify possible measures to eliminate or reduce such waste. The evaluation shall be conducted in cooperation with the Commission staff and staff of the Department of Health's Safe Drinking Water Branch, which regulates the drinking water system.

14. Within six (6) months from the date of approval of a water use permit for the well, the applicant shall 1) implement a leakage control and detection system and compete repairs to prevent such leakage and 2) implement use of xeriscaping and low-flow fixtures.

15. Action on the future use portion of the water use permit application for Well #17 (Well No. 0901-01) is deferred pending the establishment of existing uses in the aquifer. Kukui Inc.'s application for uses in excess of those uses existing on July 15, 1992 will be considered "new" uses and will be taken up by the Commission as soon as other existing use applications have been decided. In the interim,
   a. The Commission shall recognize that there is disagreement between the applicant's staff calculations of reasonable-beneficial existing use
   b. The Applicant will have the burden of proof to show within six (6) months reasonable-beneficial existing use calculations that support the applicant's request as opposed to staff's calculations.
   c. The Commission's enforcement of the approved existing use allocation will be suspended for six (6) months.

16. The permittee shall submit a notice of intent and written request to continue the use at least ninety (90) days prior to the expiration of the interim five-year permit.

17. The Commission shall delegate to Maui Department of Water Supply the authority to allocate the use of water for municipal purposes, as provided in §174C-48(b).

18. Maui Department of Water Supply shall be exempt from the requirements for permit modifications, as provided in §174C-57(c).

19. The permittee must meter water use and monitor chloride concentrations on a monthly basis and submit monthly reports of water use and chloride concentrations to the Commission.

20. Standard Condition 16 is waived for saltwater wells.

21. The permit will be revoked if (1) stream monitoring shows that pumping the well reduces stream flow, or (2) the electromagnetic resistivity survey indicates that the
well was drilled into a dike compartment, unless the applicant submits a petition for an amendment to the interim instream flow standard with the well completion report. However, no use of the water may be made without a Pump Installation Permit, which cannot be issued during consideration of the amendment of the interim instream flow standard.

22. The applicant shall present the results of the electromagnetic resistivity survey, pump tests, and stream monitoring to a community meeting as well as to the Commission.

23. A final determination of water use quantity shall be made within five (5) years of the filing date of the application (<Insert Date>) to continue existing use.

24. The applicant shall implement, by December 31, 1995, a biological and hydraulic monitoring program for a minimum 2-year period that: 1) documents the existing operating procedure, 2) seeks to identify the impacts of all operating alternatives on Waikolu Stream, and 3) seeks to identify the effectiveness of weir modifications (Dam No. 1). This program shall incorporate the three new wells, Wells #4-6 (Well Nos. 0855-06, -05, &-04, respectively), which may be pumped within the approved limits, for monitoring and testing purposes only. Further, semi-annual reports summarizing data and preliminary findings shall be submitted to the Commission. It is suggested that the Department of Agriculture work with the State Division of Aquatic Resources and other affected agencies to prepare the monitoring program in light of the difficult technical questions raised by this application. A particular concern is the coordination of this monitoring program with the ongoing National Park Service study by Anne Brasher. A draft of this plan shall be submitted to the Commission staff within ninety (90) days for technical review and comment. Results of the monitoring program shall be used to make recommendations to the Commission on any additional use of the wells, and shall be made readily available to all interested parties.

25. That the Commission approves the well construction permit for the Kamiloloa-Waiola Well (Well No. 0759-01), subject to the standard well construction conditions and the special conditions for the pumping well for the aquifer tests.

26. That the Commission authorizes the Chairperson to approve and issue a pump installation permit upon acceptance of adequate pump test result, subject to the standard pump installation conditions.

27. Should the well be used for back-up domestic supply, applicant is advised to contact DOH or otherwise ensure safe drinking water quality is maintained.

28. The applicant shall follow the agreed monitoring plan.

29. If pesticides used by the applicant are found in ground or surface water and can be traced to the applicant's use, the CWRM may revoke the permit immediately upon such finding.
30. Issuance of the interim permit shall be withheld until the reservation of water for DHHL is set by rule. Applicant may continue this existing use within the approved limits.

31. The applicant shall submit well modification and pump installation permit applications for administrative approval by chairperson prior to beginning any work required to complete well.

32. Should any stream flow impacts result from use, petition to amend interim instream flow standards shall be submitted.

33. Should any dewatering result from use, pumping shall cease immediately.

34. Shall submit accurate schematic diagram of distribution system for the battery of 5 wells.

35. Shall be subject to a 6-month independent audit & monitoring.

36. Final pump capacity shall be determined from pump test results & approved administratively by signature of chair.

37. The permittee shall seek and submit to the Commission within ninety (90) days written confirmation from the Department of Land Utilization of the non-conforming use.

38. Pumping shall cease immediately if the chloride reports show that the brackish water developed in the well exceeds 1,000 mg/l of chloride, unless a variance from the chloride limit has been granted. The authority to approve future variance requests is delegated to the chairperson.

39. The duration of the interim permit shall be:
   a. To July 1, 2006, or
   b. Until treated wastewater is available and acceptable for use, or
   c. Until such time that a significant change in permitted, actual, or projected uses or water supply occurs.

40. Action on any interim permit may be initiated by the Commission or any permittee upon letter request or pursuant to §174C-57 Haw. Rev. Stat. (Modification of permit terms).

41. This permit is approved under the assumption that wastewater will become available for reuse as an alternative supply source.

42. Require adherence to the chloride sampling protocol and the submittal of weekly chloride data. The authority to approve variances from the weekly reporting requirement is delegated to the Chairperson.

43. Require adherence to the Conservation Conditions.
44. In the event a water shortage is declared by the Commission, permittees in the <Insert Aquifer System> shall comply with the <Insert Aquifer System> water shortage plan adopted by the Commission.

45. The permittee shall contact the Department of Health, Clean Water Branch and obtain the necessary discharge permit(s).

46. Permit shall be interim and replaces existing WUP for 2051-07 & 11.

47. Applicant shall submit an acceptable archaeological inventory survey report to DHP. If historic sites affected, a plan to mitigate these affects must be accepted by DHP and completed by applicant.

48. Should the well be used for back-up domestic supply, applicant is advised to contact DOH or otherwise ensure safe drinking water quality is maintained.

49. (The permittee) may report monthly pumpage on yearly basis.

50. Prior to issuance of any permits, must submit filing fee for after-the-fact pump installation permit.

51. The term of this permit shall be twenty years from the date of issuance of the permit with a five-year Board review to determine compliance with the provisions of the permit.

52. The amount of water to be withdrawn under this permit shall be 0.19 mgd, averaged annually, for irrigation use. This permitted use of 0.19 mgd when added to a preserved use of 0.27 mgd amounts to a total of 0.46 mgd, averaged annually, which may be withdrawn from well 1646-01.

53. The use authorized by the permit must not interfered substantially and materially with existing individual household uses and existing uses.

54. The use of this well shall be subject to the shortage and emergency powers of the Board of Land and Natural Resources (BLNR).

55. This permit may be suspended or revoked, in accordance with Chapter 166.

56. The permit holder may be required to relinquish this permit to BLNR, in accordance with Chapter 166.

57. The withdrawal from Well 1646-10 shall be recorded and reported to DLNR on a monthly basis by the permittee.

58. In the event that emergency water use occurs, the permittee shall notify the Commission in writing within one (1) day of pumping, to inform the Commission as to the nature of the emergency and the expected duration of the emergency. A water
use report shall also be filed pursuant to Standard Condition 10 and Administrative Rule 13-168-7.

59. Note DOH’s requirements related to non-potable water systems (attached to original permit).

60. Standard Condition 16 requiring the submittal of a water shortage plan is waived.

61. All non-potable spigots and piping shall be clearly labeled as “DO NOT DRINK, NON-POTABLE” to prevent direct human consumption.

62. Standard Condition 10 is modified. Due to the inability to take water level measurements, the requirement to measure monthly water levels is waived. In addition, as long as the U.S. Geological Survey is collecting and analyzing the chloride content of the well water, the requirement for the permittee to measure and report chlorides is also waived.

63. Well elevation components must be surveyed by a licensed surveyor and this information must be submitted to commission prior to issuance of permanent permit.

64. The permittee shall obtain approvals from the Department of Health and the U.S. Environmental Protection Agency prior to use of the water.

65. This water use permit, WUP No. <Insert #>, shall supersede WUP No. <Insert #>.

66. WUP No. <Insert #> is revoked

67. Standard Condition 17 is waived.

68. Standard Condition 22 for interim water use permits shall not apply.

69. To supplement our records, we request that you provide a map of the Galbraith Est. lands west of Wahiawa (2100 ac+-) and the associated TMK’s for use area.

70. Deferred action on portion requested for golf course irrigation pending further refinement of irrigation requirement and a feasibility study for utilization of surface water sources, including Wahiawa Reservoir.

71. Written justification be provided for any 'cushion' of 0.5 mgd.

72. The water use permit shall be an interim permit. The duration of the interim permit shall be until treated wastewater is available and acceptable for use. The permittee shall continue discussions with Honolulu Board of Water Supply regarding the use of reclaimed water.

73. The permittee is put on notice that this is a qualified approval in that this permit may be modified or revoked prior to the expiration of the interim permit if the
Commission decides that the use of additional basal ground water for dust control and landscape irrigation is not reasonable-beneficial use.

74. The permittee encouraged to use drought-tolerant landscaping to conserve water.

75. Should the applicant provide written evidence that the county DHCD approves a 201E exemption for the elderly affordable housing project then the applicant may modify a corresponding portion of their existing aquacultural use to be used by the exemption approved project within the Commission approved water use permit limits under recommendation 5.

76. The applicant shall obtain a water lease/permit from Land Division prior to actual use of the well water.

77. Require the permittee to sign a contract by May 14, 1998 with the City Department of Wastewater Management to buy and use 0.400 mgd of R-1 water for a corresponding reduction in allocation for Well Nos. 1900-02, 17 to 20, and 1901-03.

78. Standard Condition 9 is waived.

79. Standard Condition 10 is modified to exempt the permittee from monthly measurements of salinity and temperature.

80. Standard Condition 10 is waived.

81. Applicant must seek a determination from BLNR and Land Mgt Div as to whether water license required. If required, license must be obtained prior to issuance of permit. If not, permit will be issued w/out further action.

82. Commission defers action on use in excess of 452,000 gpd pending additional info from BWS and further staff analysis.

83. The permit shall be subject to the Commission's sustainable yield review by December 1990.

84. The Commission shall delegate to the Honolulu Board of Water Supply the authority to allocate the use of water for municipal purposes, in accordance with §174C-48(b) HRS.

85. Honolulu Board of Water Supply shall be exempt from the requirements of permit modifications as provided in §174C-57.

86. BWS must participate in discussions, to be coordinated by Commission Staff, regarding a monitoring program to address impacts to Kaneohe Bay water quality, prior to any action on applications for future municipal uses.

87. A pump installation permit application must be made and approved prior to the installation of a permanent pump.
88. The water withdrawn shall be 0.7 mgd for municipal use.

89. The installed pump capacity of the well shall not be more than 700 gpm or 1.01 mgd.

90. The term of permit shall automatically expire twelve months from the date of issuance.

91. The Honolulu Board of Water Supply may continue to submit monthly water data on their own form, provided that the data are submitted in a format that is acceptable to the Commission staff.

92. Standard Condition 7 shall not apply.

93. Standard Condition 22 shall not apply.

94. Standard Condition 10 is modified to exempt the permittee from monthly measurements of salinity and temperature.

95. This permit shall be subject to conditions providing for stream restoration if the Commission determines that additional water should be returned to the streams.

96. HECO 1 mgd for industrial use

97. Campbell Estate 1 mgd for municipal use through BWS, by separate agreement with HECO

98. BWS 1 mgd for municipal use.

99. The permit shall be subject to the Commission’s sustainable yield review by <Insert Date>.

100. The applicant shall obtain the current version of the Department of Health’s Guidelines Applicable to Golf Courses in Hawaii. Where relevant and viable, items of the guidelines should be implemented and sustained appropriately. To obtain the current version, contact the Safe Drinking Water Branch, Environmental Management Division at 808-586-4258 (Honolulu).

101. The future use portion of the application shall be deferred until existing uses in the Koolauoa area are established.

102. The water to be withdrawn under this permit shall be a total of 0.03 mgd (0.02 mgd preserved plus an additional 0.01 mgd permitted use), averaged annually, for domestic and irrigation use.

103. Existing well 1851-09 shall be properly sealed by a licensed drilling contractor. A well modification permit application, enclosed, shall be submitted to the Department for approval of the well sealing. A filing fee for sealing the well will not be required.
104. The permittee is required to test the source using a certified private laboratory and submit the test results to the Commission within three (3) months. The Commission will then forward the results to the Department of Health for their review. The Department of Health recommends that the well be routinely tested for microbiological and chemical parameters thereafter.

105. The permittee is required to submit a completed Registration of Well and Declaration of Water use by <Insert Date>.

106. The permittee shall contact the Department of Health for a written determination on the status of their water system and comply with any Department of Health requirements for monitoring and testing.

107. In the event that the original spring source decontaminates, the new well authorized will be shut down.

108. That within each aquifer the total permitted use shall not exceed the sustainable yield.

109. That any water available for allocation shall be for in-district use.

110. That scheduled reductions to Oahu Sugar Co. permitted use shall be initiated upon final termination of an Osco lease or sub-lease, whichever occurs later.

111. That permits for water use issued in accordance with the proposed schedule shall be interim permits subject to review and adjustment by 1995.

112. That the permit shall be an interim permit for a new use which is afforded to existing users as specified in §13-171-20.

113. That the original allocation of 0.200 mgd shall be taken to hearing for possible revocation at a later date to complete the transfer of the water use permit entirely to Well No. 3407-02. This revocation would reduce the current allocation afforded to the Kunihiro Well (Well No. 3406-06) to zero.

114. This allocation incorporates the unspecified domestic needs of the applicant and therefore necessitates a single meter be installed at the well.

115. Should any impacts to nearby wells or streams be established by the use of this well, the applicant shall address these issues to the satisfaction of the Commission.

116. If an economically feasible nonpotable source is identified, the applicant shall convert to the alternative nonpotable source.

117. The permit shall be subject to the Chairperson’s approval of a water use plan recommending possible measures to prevent or minimize saltwater contamination and establish courses of action to follow should the aquifer become to saline to use.
118. Permittee shall provide the necessary end-use information on the 10th residence to allow regulation of the use under Chapter 174C.

119. Standard Conditions 10 & 18 shall not apply.

120. Standard Condition 10 is modified to exempt the permittee from the requirement to install a flowmeter. Salt water withdrawals may instead be estimated based on pumping capacity and run time.

121. The applicant shall review the existing year long period of pumpage and streamflow data and provide analysis on ground and surface water interaction. Deadline is January 25, 1994.

122. The water use permit for Well Nos. 2301-27 to -32 for 0.75 mgd (WUP No. 419) shall be revoked upon issuance of a pump installation permit for the well.

123. The permittee shall use mulching to decrease evaporative losses and manage irrigation scheduling to minimize water demand.

124. The permittee shall submit a detailed agricultural plan to support any future water use permit application for increased agricultural use at this parcel.

125. If not already obtained, the permittee shall seek and obtain any necessary permits from the Department of Health for the proposed discharge to Malaekahana Stream.

126. Standard Condition 10 is modified to waive the requirement for installing a water meter on Well Nos. 2358-21, 22, and 29. The permittee shall install a water meter on Well No. 2358-26 to measure total monthly flow through the discharge line. This quantity should then be assumed to be the rate of natural flow from the other three wells for monthly reporting purposes.

127. The permit shall be effective upon submittal of documentation by Navy that it has met the DOH requirements for a public system.

128. This WUP shall be subject to Army's application for a WUP to reduce the permitted use of the Army's Schofield Shaft (2901-02 to 04, 10) by 0.208 mgd to a new total of 5.648 mgd. The Army's application shall be submitted within 60 days after the approval of this WUP or this WUP shall be void. Approval of the modification request shall be obtained from the CWRM prior to use of Well No. 3100-02 and issuance of this WUP.

129. Navy shall submit an after-the-fact PIPA, and approval of the permit shall be obtained prior to use of the well.

130. The well shall not be used for drinking water purposes unless it is properly tested and treated.
131. This permit is approved subject to reclaimed water becoming a practical alternative and provided that the Department of Health approves the reuse application.

132. Should any opae ula be recovered in the well water, the permittee shall notify the Division of Aquatic Resources and provide specimens to the Division of Aquatic Resources for analysis.

133. If a single meter at the well is used, the Commission shall allow an additional 1,000 gallons per day to the water use permit amount for the domestic needs of two residences, although a permit for individual domestic consumption is not required. Otherwise, the applicant must provide a meter to separately measure the irrigation consumption.

134. This permit is approved under the requirement that conversion to either: 1) treated wastewater becoming available for reuse as an alternative supply source, provided that Department of Health concerns over the use of treated effluent over the potable water aquifer have been addressed; and/or 2) other nonpotable source becoming available will occur in a timely manner.

135. These permits shall be subject to a review of actual use within four years for possible modification of the permitted amount.

136. The permit shall be reviewed in two (2) years for possible additional revocation due to nonuse.

137. The allocation is based on the projects listed in Exhibit 5 (of Item 10 of the May 20, 1998 Staff Submittal), except for the Queen's Beach GC (TMK 139-11-2,3), Lot 9 (TMK 139-17-51), and Varsity Place (TMK 128-24-35).

138. Kamehameha Schools Bishop Estate/Honolulu Board of Water Supply shall transfer the water use permit within ninety (90) days of the effective date of the transfer of the pump station to the Honolulu Board of Water Supply, pursuant to §174C-59 Hawaii Revised Statutes.

139. The permittee shall ensure that the water is recycled by either directing it into the Waiahole Ditch for use by downstream farmers (subject to the approval of the Agribusiness Development Corporation's Board) or into Waikele Farm's existing irrigation system.

140. The permittee shall file a completed application to modify WUP No. 758 to reduce the allocation by 0.100 mgd within 60 days. If a completed water use permit modification application is not received within 60 days from this submittal's date, then the subject water use permit application (WUPA No. 767) shall be deemed denied without prejudice without the need for another hearing.

141. The water withdrawn shall be for municipal use. No improvements to the existing sources are required as the existing source capacities are greater than the increase.
142. Water license must be determined through LM.

143. Proposed other uses will be considered at a later date.
15 Dec 11 water w/ KC = NE ag use

priority now for Pump 3 - building collapsing, scarp & water (electric)
(2 wells) total investment ~*10m
Pump 3 battery of hydro

Opseclee Res: 60-70 mg

2500 ac diversified Jackson/keep lease machinery
2300+ 400 below cattle manka
Aloha Kaeo,

Mr. Charley Ice called our office today to request a North Shore Field Visit.

I asked him to recap this request in the email below, which would be the most effective communication for everyone involved.

I advised him that your office is closed today for an off-site meeting and that he should be hearing from you shortly.

Mahalo,
Bobbi

From: Charley.F.Ice@hawaii.gov [mailto:Charley.F.Ice@hawaii.gov]
Sent: Friday, December 09, 2011 10:23 AM
To: Barbara Nihipali
Subject: Northshore field visit

Thanks, Bobbi, for helping out with this. I also see that we’re having a meeting with some of you folks on the 15th, here in our office. I hope to get a preview, and I’ll be in the field the previous day, with other permittees.

We’re doing a general review of water use permits in the Northshore area, because we need to revoke the Waialua Sugar allocations and update our files for the next applicants for water use. We’ll be taking it to the Water Commission, and want to present a review of all permittees, including several small ones. It’s also part of a 20-year review required by the Water Code and underway for a few years, with preliminary information gathered by consultants Brown & Caldwell. Our previous written inquiry was answered by your indication that new uses would grow in the coming years, even if current use is below your allocations from wells acquired from Waialua Sugar. For this reason, we would not recommend revocation, but it will be good to present a picture of what is on the ground now. In the future, we’ll be needing water use footprints for comparison to new use applications and to avoid confusion from multiple applications.

We’d like to arrange a field visit, possibly next week, to get the lay of the land and get oriented to present and future uses.
Charley Ice
Hydrologist
Hawaii Water Commission
1151 Punchbowl 227 Kalanimoku
P.O. Box 621, Honolulu 96809
(808) 587-0218

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July 7, 2010

Mr. Imiola Lindsey  
Kamehameha Schools  
78-6831 Alii Drive, Suite 235  
Kailua-Kona, HI 96740

Dear Mr. Lindsey:

Certificate of Pump Installation Completion for KS Wells B&C (Opaeula Pump3 Battery)  
Well No. 3505-02 & 03 (TMK (1) 6-2-010:001)

We are pleased to inform you that the Pump Installation work permitted for the KS Wells B&C (Opaeula Pump3 Battery) (Well No. 3505-02 & 03) is complete and acceptable. This certificate of pump installation completion allows you to continue pumping your well for reasonable & beneficial water use in accordance with your new Water Use Permit No. 894.

To protect Hawaii’s natural ground water resources for the benefit of all, the following requirements apply to the use of your well:

1. If the well is not in use it must be properly capped.

2. If the well is to be abandoned then the landowner must cause a licensed contractor to apply for a well abandonment permit in accordance with §13-168-12(f), HAR, prior to any well sealing or plugging work.

3. In the event that the well operator and/or landowner changes, the Commission shall be notified prior to the change.

4. In the event the benchmark in the concrete base of the well is altered in any way, an updated version of the Well Elevation page of the Well Completion Report Part I shall be submitted to the Commission. If a licensed surveyor had estimated the original benchmark elevation then a licensed surveyor must establish the new benchmark elevation. The Well Elevation portion of the Well Completion Report Part I can be obtained by contacting Commission staff or at www.hawaii.gov/dlnr/cwrm/forms.htm.
5. Your approved pump has a capacity of 600 gpm at a head of 540 ft. In the future, pump replacements of equal or lesser capacity will not require an additional permit from the Commission, but will require the submission of a Well Completion Report Part II by the licensed pump installer. If the pump replacement is greater than the existing pump, you will need to apply for a new pump installation permit.

6. The landowner shall cause the well operator to maintain the installed 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 monthly and reported to the Commission on a monthly basis, on forms provided by the Chairperson (attached), in accordance with §13-168-7, HAR. Blank water use report forms are also available at www.hawaii.gov/dlnr/cwrm/resources_permits.htm

7. 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. The authorization to drill a well and/or install a pump shall not constitute a determination of correlative water rights. The landowner and well operator are notified that the quantity of water taken from the well and/or the pump capacity could be reduced by the Commission in the future.

Because ground water in Hawaii is a public trust, and adverse effects at one well may affect other water resources, any violation of the above conditions or any other provision of the Hawaii Administrative Rules may be subject to fines of up to $5,000 per day. The Commission needs your help and asks that you to do your part in utilizing this shared resource. We prefer to work with you in meeting the goal of protecting our ground water resources together.

If you have any questions, please contact Charley Ice of the Commission staff at 587-0218 or toll-free at 974-4000 (Hawaii), extension 70218.

Sincerely,

LENORE N. OHYE
Acting Deputy Director

CI:ss
Encl: Water Use Report Forms

c: Honolulu Board of Water Supply
   Beylik Drilling and Pump Services, Inc.
July 7, 2010

Mr. William Moore
Beylik Drilling and Pump Services, Inc.
91-259A Olai Street
Kapolei, HI 96707

Dear Mr. Moore:

Well Completion Report Part II for Well Nos. 3505-02 & 03

We received your Well Completion Report Part II for the KS Wells B & C (Opaeula Pump 3 Battery) (Well Nos. 3505-02 & 03) on May 10, 2010 for your pump replacement and acknowledge that it is complete. This completes your obligations under pump replacement installation reporting requirements. Additionally, a certificate of pump installation completion will be issued to the well operator/landowner to officially recognize the current details of the installed pump, and a copy will be sent to you.

If you have any questions, please contact Charley Ice of the Commission staff at 587-0218.

Sincerely,

LENORE N. OHYE
Acting Deputy Director

CI:ss

c: Kamehameha Schools
Pump Replacement for Well No. 3505-02&03 (GW regulation)

1. From Roy ____________(initial)

**Pump Tests Check (special condition of PIP? Yes/No)**

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>If no, describe deficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>□&lt;70 gpm no test required</td>
</tr>
</tbody>
</table>

Step-Drawdown Test:
- followed WCPI Stds
  - analysis attached

Aquifer Pump Test:
- followed WCPI Stds
  - T & S analysis attached

Potential Well Interference:
- No

Potential Stream Impacts:
- No

Additional Testing or Data Required:
- No

Pump Test Comments Attached:
- No

Proposed Pump Capacity is OK:
- No

2. **Pump Installation Check**

   Charley/Ryan ____________(initial)

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>NA</th>
<th>If no, describe deficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>□</td>
</tr>
</tbody>
</table>

- data complete
- followed Special Cond & Elevations
- well database updated

ATTACHMENTS FOR ACCEPTANCE:
- 1WCR2 ACCEPTANCE LETTER ✔
- 2PUMP INST. COMPLETION CERTIFICATE ✔
- 3METER INSTALL. REPORT (IF NECESSSARY) ✔
- 4WUR FORM(if necessary) ✔
- SUSGS MAP UPDATED ✔
- 6PARCEL CHECK ✔
- 7WELL DATABASE INPUT CHECK ✔
- 8PUMP TEST WORKSHEET ✔
- 9PUMP As-Built CHECK PRINT ✔

   To be sent to driller
   To be sent to landowner/operator
   Staff internal checks

3. Roy _____________ (initial) check(Entered WCR 2/PICC accept date into database)

4. Susan H. __________ (initial) finalize

5. Ken ____________ (initial) signature

6. Charley/Ryan File

[Signature lines]

---

484

516

544

572

600

628

656

684

712

740

768

796

824

852

880

908

936

964

992

---

**Legal KSPG Name:**

See edits concerning
TO

COMMISSION ON WATER RESOURCE MANAGEMENT

P.O. BOX 621

HONOLULU, HI 96809

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

□ Shop drawings □ Prints □ Plans □ Samples □ Specifications

□ Copy of letter □ Change order □ ________________________

<table>
<thead>
<tr>
<th>COPIES</th>
<th>DATE</th>
<th>NO.</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>04/30/10</td>
<td></td>
<td>WCR: PART II - KAMEHAMEHA SCHOOLS WELL B - C</td>
</tr>
</tbody>
</table>

STATE WELL NO.: 3505-02-03

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 ________________________ □ PRINTS RETURNED AFTER LOAN TO US

REMARKS

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

COPY TO 1630M/C FILE

SIGNED: __________________________

WILLIAM "BILL" MOORE
PROJECT MANAGER

If enclosures are not as noted, kindly notify us at once.
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
WELL COMPLETION REPORT - PART II
Pump Installation

Instructions: Please print in ink or type and send completed report (with attachments, if applicable) to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. The Commission may not accept incomplete reports. This form shall be submitted within 60 days of the completion of work. For assistance, please consult the Hawaii Well Construction and Pump Installation Standards or call the Regulation Branch at 587-0225. For updates to this form or additional information, please visit our website at http://www.hawaii.gov/dlnr/cwrm/

<table>
<thead>
<tr>
<th>1. State Well No.:</th>
<th>3505-02/03</th>
<th>Well Name:</th>
<th>KSB WELL B/C</th>
<th>Island:</th>
<th>OAHU</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Address:</td>
<td>PAALAAA, WAIALUA, (OAHU) HAWAII</td>
<td>Tax Map Key:</td>
<td>6 - 2 - 010 - 001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Pump Installation Company:</td>
<td>BEYLIK DRILLING &amp; PUMP SERVICE, INC.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Date Pump Installed:</td>
<td>04/09/2010</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. PERMANENT PUMP INFORMATION</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pump Type, Make, Serial No.:</td>
<td>SUBMERSIBLE GOULD SN: 565236</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rated Capacity:</td>
<td>600</td>
<td>gpm</td>
<td>at head of:</td>
<td>540</td>
<td>ft.</td>
</tr>
<tr>
<td>Motor Type, H.P., Voltage, rpm:</td>
<td>SUBMERSIBLE 125HP - 460 VOLT - 3540</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pump type (check one):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>□ Deep Well Turbine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Rotary</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>□ Propeller</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>□ Submersible</td>
<td></td>
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<td></td>
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<tr>
<td>□ Rotary-Displacement</td>
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<td></td>
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<tr>
<td>□ Reciprocating</td>
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<td></td>
<td></td>
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<tr>
<td>□ Centrifugal</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>□ Rotary-Gear</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>□ Impulse</td>
<td></td>
<td></td>
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<tr>
<td>6. Method of flow measurement:</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>□ Flowmeter w/ totalizer Manufacturer FLOW SIGNAL</td>
<td>Model no. HVT CF</td>
<td>Size</td>
<td>6&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Other, explain and attach schematic</td>
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<tr>
<td>7. Fill in the as-built section on the other side of this sheet.</td>
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<tr>
<td>8. Attach the rating curve for the installed pump.</td>
<td></td>
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<tr>
<td>9. Attach photograph of well clearly showing the benchmark on the concrete pad, the well head, and the method of flow measurement.</td>
<td></td>
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</tr>
<tr>
<td>10. Well Owner Company</td>
<td>KAMEHAMEHA SCHOOLS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>78-6831 ALII DRIVE, SUITE 235 KAILUA-KONA, HI 96740</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phone</td>
<td>808-322-5300</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fax</td>
<td>808-322-9446</td>
<td></td>
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<tr>
<td>11. Land Owner Company</td>
<td>SAME AS ABOVE</td>
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<tr>
<td>Address</td>
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<tr>
<td>Fax</td>
<td>SAME AS ABOVE</td>
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<tr>
<td>12. Remarks</td>
<td></td>
<td></td>
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</tbody>
</table>

Pump Installation Contractor (print) BEYLIK DRILLING & PUMP SERVICE, INC.
C-57/C-57a/A Lic. No. AC-21896
Signature [Signature] Date 04-28-2010
ITT CORPORATION - Goulds Pumps - Turbine Operation Performance Test Results

Test Date: 9/2/09

Customer: BEYLJK DRILLING
SO: 565236
Model: 8RJHC
Pump No: 1
Stages: 6
1st Imp Dia: 5.06 in
2nd Imp Dia: 4.25 in
Speed: 3480 RPM

Certified Test Results
By: [Signature]
Title: ENGINEER
Date: September 2, 2009

7. AS-BUILT PUMP SECTION  (Please attach as-built if different from diagram provided below)

Bench mark elevation surveyed to nearest 0.01 ft. = 51.15 ft. mean sea level

Elevation of top of chase tube = 52.15 ft. mean sea level

Pump intake depth = 65.5 ft. (referenced to bench mark)

Chase tube depth = 60 ft. (referenced to bench mark)

If airline installed, bottom of airline elevation = N/A ft. mean sea level
Well B, looking south with Station 3 in the background

SKETCH OF WELL LOCATION
(Referenced to permanent landmark, i.e. building, road, fence, etc.)
Provide Latitude and Longitude of well referenced to NAD83 to nearest second

NAD83:
Latitude: 21 degrees 34 min 58 sec
Longitude: 158 degrees 5 min 35 sec

Attach photos of completed well and concrete pad

EXAMPLE
Lat: 19°36'45" W
Long: 154°57'18"
Well Elevation

Benchmark Elevation 51.15

Attach photos of completed well and concrete pad showing benchmark location.

I certify that the elevation shown above:

1) Was done in accordance with acceptable surveying practices
2) Is accurate to the nearest 0.01 ft.
3) Is referenced to mean sea level

See attached memo from P. Cummins

Surveyor ______________________ License No. ________ Date ____________
7. AS-BUILT PUMP SECTION (Please attach as-built if different from diagram provided below)

Bench mark elevation surveyed to nearest 0.01 ft. = 51.05 ft. mean sea level

Elevation of top of chase tube = 52.05 ft. mean sea level

Pump intake depth = 65.5 ft. (referenced to bench mark)

Chase tube depth = 60 ft. (referenced to bench mark)

If airline installed, bottom of airline elevation = N/A ft. mean sea level
Well C, looking east with Station 3 in the background

Attach photos of completed well and concrete pad

NAD83:
Latitude: 21 degrees 34 min 58 sec
Longitude: 158 degrees 5 min 35 sec

SKETCH OF WELL LOCATION
(Referenced to permanent landmark, i.e. building, road, fence, etc.)
Provide Latitude and Longitude of well referenced to NAD83 to nearest second
Well Elevation

Benchmark Elevation 51.05

Attach photos of completed well and concrete pad showing benchmark location.

I certify that the elevation shown above:

1) Was done in accordance with acceptable surveying practices
2) Is accurate to the nearest 0.01 ft.
3) Is referenced to mean sea level

See attached memo from P. Cummins

Surveyor

License No.

Date
Mr. Thomas E. Arizumi  
Department of Health  
Safe Drinking Water Branch  
P.O. Box 3378  
Honolulu, HI 96801  

Dear Mr. Arizumi:

Preliminary Engineering Report  
to Certify Waialua Sugar Company’s  
Pump 3 (State Well Nos. 3505-01 to 20)  
as a Source of Drinking Water Supply

We have reviewed the subject report to certify the Pump 3 battery of wells as a source of drinking water for the Kawaiola Camp.

Some of the information in Section 2.1. is incorrect. Authorized use of Pump 3 was reduced from 3.160 million gallons per day (mgd) to 1.552 mgd by action of the Commission on Water Resource Management on June 2, 1993. The report correctly states that 0.108 mgd of the total allocation is designated for domestic use.

If the planned domestic use of the well exceeds 0.108 mgd, then a modification of the permit is required, pursuant to Section 13-171-23 of our Administrative Rules. To convert the system source from Pump 17 to Pump 3, the report states that a new 600 gpm pump will be installed. Section 13-168-12 HAR requires that a pump installation permit be obtained prior to any work being done to replace the pump. Lastly, a modification of the temporary permit for Pump 17 may also be required. Pump 17 has authorized use of 8.630 mgd, of which 0.432 mgd may be used for domestic purposes.

Thank you for the opportunity to review the report. If you have any questions, please contact Lenore Nakama at 587-0218.

Sincerely,

RAE M. LOUI
Deputy Director

LN:ko  
c: Waialua Sugar Company, Inc.
The Honorable Keith W. Ahue  
Chairman of the Board  
Department of Land and Natural Resources  
1151 Punchbowl Street  
Honolulu, HI 96813

Dear Mr. Ahue:

SUBJECT: PROPOSED SOURCE OF POTABLE WATER

Enclosed for your review and comments is a copy of the engineering report for the following source:

Waialua Sugar Pump 3  
State Well No. 3505-01 to -20  
Waialua, Oahu

This report has been prepared pursuant to Hawaii Administrative Rules, Title 11, Chapter 20, Rules Relating to Potable Water Systems, section 11-20-29.

The Department of Health will use your comments in determining the potential impacts which may result by the proposed project.

Please submit your comments to the Safe Drinking Water Branch within 30 days from the date of this letter. You may also return the engineering report to this office if you do not need it for future reference.

If you should have any questions, please call the Safe Drinking Water Branch, Engineering Section at 586-4258.

Sincerely,

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

Enclosure
Trends!

itron

(Construction approval = 6/24/16)

Please check allocations for Pump 3 & Pump 17. I think

5/26/16
The Honorable Keith W. Ahue  
Chairman of the Board  
Department of Land and Natural Resources  
1151 Punchbowl Street  
Honolulu, HI 96813

Dear Mr. Ahue:

SUBJECT: PROPOSED SOURCE OF POTABLE WATER

Enclosed for your review and comments is a copy of the engineering report for the following source:

Waialua Sugar Pump 3  
State Well No. 3505-01 to -20  
Waialua, Oahu

This report has been prepared pursuant to Hawaii Administrative Rules, Title 11, Chapter 20, Rules Relating to Potable Water Systems, section 11-20-29.

The Department of Health will use your comments in determining the potential impacts which may result by the proposed project.

Please submit your comments to the Safe Drinking Water Branch within 30 days from the date of this letter. You may also return the engineering report to this office if you do not need it for future reference.

If you should have any questions, please call the Safe Drinking Water Branch, Engineering Section at 586-4258.

Sincerely,

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

Enclosure
Dear [Name],

Please check allocations for Pump 3 & Pump 17. I think we need to modify WUPs for both sources to reflect change.

Thanks,

Permitted use of Pump 3 is 1,552 mgd (reduction approved 6/2/93). See draft letter. Thanks! [Signature]

[Date]
February 10, 2012

Mr. Imiola Lindsey, P.E.
Kamehameha Schools
Land Asset Division
78-6831 Alii Drive
Kailua-Kona, HI 96740

Dear Mr. Lindsey:

Commission on Water Resource Management
Meeting: Wednesday, February 15, 2012 (9:00 a.m.)
Review of Water Use Permits
Partial and/or Complete Revocations
Waialua Ground Water Aquifer System Area, Waialua, Oahu

On February 15, 2012, the Commission on Water Resource Management (Commission) will meet and review all water use permits in the Waialua Ground Water System Area. Enclosed is a copy of the staff submittal recommending partial or complete revocation or continuation of existing ground water use permits. Your well is among those which will be reviewed and acted upon.

You are invited to attend and discuss your wells. The meeting is scheduled for 9:00 a.m. in the DLNR Board Room 132, 1151 Punchbowl Street, Honolulu, Hawaii.

This meeting follows a review of all water use permits, information available in the public record, and field visits. Many of the ground water use permits date back to 1981 when the Waialua Ground Water Control Area was designated by the Board of Land Natural Resources. Many wells are old. Much of the water use approved at that time was for plantation agriculture, which has subsequently ceased. Unused allocations need to be revoked to make ground water available for new uses. The Commission will consider wellhead conditions for old wells in order to meet current standards for protecting ground water.

If you have any questions, please contact Charley Ice of our staff at [Contact Information]

Sincerely,

WILLIAM M. TAM
Deputy Director

Cl:ss
Enclosure (Submittal)
<table>
<thead>
<tr>
<th>FROM:</th>
<th>Charley</th>
<th>DATE:</th>
<th>06 Sep M</th>
</tr>
</thead>
<tbody>
<tr>
<td>TO:</td>
<td>IMATA, R.</td>
<td>INIT.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>UYENO, D.</td>
<td>INIT.</td>
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<tr>
<td></td>
<td>CHONG, R.</td>
<td>INIT.</td>
<td></td>
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<tr>
<td></td>
<td>FUJII, N.</td>
<td>INIT.</td>
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<tr>
<td></td>
<td>KIMURA, J.</td>
<td>INIT.</td>
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<tr>
<td></td>
<td>YOSHINAGA, M.</td>
<td>INIT.</td>
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<tr>
<td></td>
<td>KUNIMURA, I.</td>
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<tr>
<td></td>
<td>Please See Me</td>
<td>INIT.</td>
<td></td>
</tr>
</tbody>
</table>

24Nov10

That's where I start; also, notice that the registration, staying (see diagram) not useful probably pointless to ask.

- I think 3505-02, 03, 08, 09 were the and changed well - what do we do then?
- Need to review files & recent docs - answers may already be there.
September 9, 2011

Mr. Imiola Lindsey, P.E.
Kamehameha Schools LAD
78-6831 Alii Drive, Suite 235
Kailua-Kona, HI 96740

Dear Mr. Lindsey:

Water Use Permits 894 & 895
Well Nos. 3505-01 to -20 ("Pump 3") and 3506-03 ("Pump 8")

Thank you for your letter response sent by email on September 6, 2011, addressing questions we raised in our letter dated August 9, 2011. We appreciate your commitment to agriculture on the North Shore and thank you for your update on activities in support. Thank you also for water use reporting for July and August of this year.

We understand that your current use is not the full amount of the existing water use permits, and accept that the amounts you will need to support future growth of agriculture on these lands will require the full approved allocations of 1.552 and 1.660 mgd. We are inclined to recommend maintaining these amounts.

If you have any questions, please contact Charley Ice of our staff at (808) 587-0218.

Sincerely,

WILLIAM M. TAM
Deputy Director

CI:ss
Aloha Roy,

Please find the attached memo addressed to Mr. Tam. We are following up with a hard copy via regular mail, but thought to email this to make sure that you and your staff received this in a timely manner.

Thank you, Imi

'Imi ola Lindsey, PE
Kamehameha Schools LAD

This message is the property of Kamehameha Schools and any attachments are confidential to the intended recipient at the e-mail address to which it has been addressed. If you are not the intended recipient, you may not copy, forward, disclose or use any part of this message or its attachments. If you received this transmission in error please notify the sender immediately by e-mail or contact Kamehameha Schools at [contact information] and then delete this message from your system. Memo_9_6_11.pdf
William M. Tam  
Deputy Director  
CWRM  
PO Box 621  
Honolulu, Hawaii 96809

Dear Mr. Tam:

The following is in response to your letter dated August 9th, 2011, regarding water use permits 894 & 895 (Pumps 3 & 8).

With the recent transfer of the water use permits to Kamehameha Schools (KS), we have contracted a third party to monitor Pumps 3 & 8 per CWRM requirements. Attached are the monthly reports beginning June of this year.

Until recently, Pumps 3 & 8 existed as aging infrastructure from the plantation era. As such, there were complicating issues for monitoring each source, which is the reason for the lag between issuance of the permits and collection of monitoring data. Originally the pumps existed as a battery of underground wells along a common header, so taking the required measurements was impractical. For the most part, such difficulties have been overcome with recent and on-going improvement projects.

KS has made significant financial investments in the water system served by Pumps 3 & 8 as part of a larger decision to support local agriculture, with over $10 million invested over the past 5 years. Additional work is in progress, and the system is planned for substantial completion by 2015.

A significant part of the investment to date, as discussed and approved by CWRM staff, was the improvement of four of the original 20 wells located at Pump 3, by isolating them from the below ground header piping, and extending/grouting the well casings to ground level. Two of these four modernized wells were outfit with well pumps and controls. KS also has near term plans to equip the remaining two wells with pump hardware.

With regard to the entire irrigation system, additional improvements were made to
- minimize transmission loss by replacing aging ditches with pressurized transmission lines
- centrally filter surface water to reduce in-field costs
- improve & decommission reservoirs, per new State regulations

All of the above-mentioned and future improvements were sized with the current water allocations (1.552 & 1.660 mgd) in mind, and the completed system, which will require 6 mgd across 2,765 acres. The majority of this demand will be served by surface water, however, Pumps 3 & 8 will be relied on heavily during periods of low rainfall.

In addition to completing the upgrade of Pump 3, KS has similar near term plans for improving Pump 8. Both sources are essential for the revitalization of agriculture in Haleiwa, as reflected by the recent improvements and the money invested.

Recent monitoring data from Pumps 3 & 8 (attached) is the most accurate accounting of usage to date, and KS is committed to continuing this monitoring per CWRM requirements. It should be noted that for the next 3 years or so, water usage numbers will not reflect true long term demand, as improvement projects continue...
throughout the system. A significant variation in pumpage throughout the year is also anticipated, with dry and wet periods not always occurring during the same months and for the same duration. Furthermore, the usage values are likely to be artificially low for several years until such time that we can complete the upgrades to our comprehensive irrigation system and put the full 2,765 acres to productive agricultural use.

During semi-annual dry periods, Pumps 3 & 8 are the sole source of water for crops on KS Haleiwa land. The wells in question provide vital security to agriculture throughout the year. These allocations are crucial to the support and revival of local agriculture, and it is essential that KS maintains the permitted amounts of 1.552 mgd (Pump 3) and 1.660 mgd (Pump 8).

Please feel free to call me if you have any questions or if you would like to discuss this matter further.

Sincerely,

[Signature]

'Imi ola Lindsey, PE
Kamehameha Schools LAD
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
MONTHLY GROUND WATER USE REPORT

Name: (KS)  July, 2011

Company: ________________________________
Address: __________________________________
Telephone No.: ___________________ Fax No.: ___________________

Report Month: __________________ Year: ___________________

INSTRUCTIONS: Please TYPE OR PRINT CLEARLY. Complete this form to report total monthly ground water use, and, if required, other information from each of your well sources. Mail to: Commission on Water Resource Management, P.O. Box 621, Honolulu, HI 96809. For assistance, please call ________________

<table>
<thead>
<tr>
<th>State Well No.</th>
<th>Well Name</th>
<th>Period Begin Date (mm/dd/yy)</th>
<th>Period End Date (mm/dd/yy)</th>
<th>Quantity Pumped (gallons)</th>
<th>Method of Measurement</th>
<th>Chloride (mg/l)</th>
<th>Temp. (°F)</th>
<th>Non-Pumping Water Level (ft. above msl)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3506-02</td>
<td>OPAULA PUMP A</td>
<td>07/01/11</td>
<td>07/27/11</td>
<td>29,182,522</td>
<td>Flow meter</td>
<td>40</td>
<td>73</td>
<td>10.2'</td>
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<tr>
<td>3506-20</td>
<td>BATTERY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3506-03</td>
<td>OPAULA PUMP B</td>
<td>07/01/11</td>
<td>07/27/11</td>
<td>8,515</td>
<td>Flow meter</td>
<td>85</td>
<td>73</td>
<td>10.3'</td>
</tr>
<tr>
<td>3506-04</td>
<td>BATTERY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Flow meter, electrical consumption, weir or flume, not metered (estimated).
** Measurement should be taken while pump is NOT running just prior to a pumping cycle; if measurement is taken while pump is running, please indicate so.

Other comments or additional information (e.g., date and method of chloride measurement, how pumpage amounts are estimated, etc.):

Submitted by (print): SID KENT  8/1/11  Title: _____________________________
Signature: ___________________________  Date: ________________________________

GWUR-MON FORM (06/10/2004)
INSTRUCTIONS: Please TYPE OR PRINT CLEARLY. Complete this form to report total monthly ground water use, and, if required, other information from each of your well sources. Mail to: Commission on Water Resource Management, P.O. Box 621, Honolulu, HI 96809. For assistance, please call...

Flow meter, electrical consumption, weir or flume, not metered (estimated).
** Measurement should be taken while pump is NOT running just prior to a pumping cycle; if measurement is taken while pump is running, please indicate so.

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<tr>
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<th>Well Name</th>
<th>Period Begin Date (mm/dd/yyyy)</th>
<th>Period End Date (mm/dd/yyyy)</th>
<th>Quantity Pumped (gallons)</th>
<th>Method of Measurement</th>
<th>Chloride (mg/l)</th>
<th>Temp. (°F)</th>
<th>Non-Pumping Water Level (ft above msl)**</th>
</tr>
</thead>
<tbody>
<tr>
<td>38605.22</td>
<td>OPAEAU PUMP 3 BATTERY</td>
<td>07/27/11</td>
<td>8/31/11</td>
<td>27,404,000</td>
<td>Flow meter</td>
<td>40</td>
<td>72</td>
<td>10.3'</td>
</tr>
<tr>
<td>38605.03 AND 38606.04</td>
<td>OPAEAU PUMP 8 BATTERY</td>
<td>07/27/11</td>
<td>8/24/11</td>
<td>10,070,000</td>
<td>Flow meter</td>
<td>90</td>
<td>79</td>
<td>10.3'</td>
</tr>
</tbody>
</table>

Submitted by (print): S I O KENT 9/1/11  
Title:  
Signature:  
Date:  

GWUR-MON FORM (06/10/2004)
Photo 1. Improved Wells “B” & “C”, piping at ground level

Photo 2. Cross country ditch lined with new pipe for efficient transmission of water
Photo 3. Fully functional central filtration station sized for 6 mgd

Photo 4. Improved Opae`ula 1 reservoir, main storage for surface water
INSTRUCTIONS: Please TYPE OR PRINT CLEARLY. Complete this form to report total monthly ground water use, and, if required, other information from each of your well sources. Mail to: Commission on Water Resource Management, P.O. Box 621, Honolulu, HI 96809. For assistance, please call [Blank].

Other comments or additional information (e.g., date and method of chloride measurement, how pumpage amounts are estimated, etc.):

Submitted by (print): SID KENT 7/9/11  
Signature: ___________________________  Date: ___________________________

GWUR-MON FORM (08/10/2004)
### Depths of the 20 Wells Which Supply Pump 3

<table>
<thead>
<tr>
<th>Letter Designation</th>
<th>State Well Number</th>
<th>Year Drilled</th>
<th>Depth (Feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>3505-01</td>
<td>1899</td>
<td>428</td>
</tr>
<tr>
<td>M</td>
<td>-13</td>
<td>1902</td>
<td>400</td>
</tr>
<tr>
<td>N</td>
<td>-14</td>
<td>1902</td>
<td>400</td>
</tr>
<tr>
<td>O</td>
<td>-15</td>
<td>1902</td>
<td>400</td>
</tr>
<tr>
<td>P</td>
<td>-16</td>
<td>1902</td>
<td>400</td>
</tr>
<tr>
<td>Q</td>
<td>-17</td>
<td>1902</td>
<td>400</td>
</tr>
<tr>
<td>R</td>
<td>-18</td>
<td>1913</td>
<td>400</td>
</tr>
<tr>
<td>S</td>
<td>-19</td>
<td>1913</td>
<td>400</td>
</tr>
<tr>
<td>T</td>
<td>-20</td>
<td>1913</td>
<td>400</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Letter Designation</th>
<th>State Well Number</th>
<th>Year Drilled</th>
<th>Depth (Feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>3505-02</td>
<td>1899</td>
<td>348</td>
</tr>
<tr>
<td>C</td>
<td>-03</td>
<td>1899</td>
<td>350</td>
</tr>
<tr>
<td>D</td>
<td>-04</td>
<td>1899</td>
<td>350</td>
</tr>
<tr>
<td>E</td>
<td>-05</td>
<td>1899</td>
<td>350</td>
</tr>
<tr>
<td>F</td>
<td>-06</td>
<td>1900</td>
<td>343</td>
</tr>
<tr>
<td>G</td>
<td>-07</td>
<td>1900</td>
<td>338</td>
</tr>
<tr>
<td>H</td>
<td>-08</td>
<td>1900</td>
<td>350</td>
</tr>
<tr>
<td>I</td>
<td>-09</td>
<td>1900</td>
<td>350</td>
</tr>
<tr>
<td>J</td>
<td>-10</td>
<td>1900</td>
<td>350</td>
</tr>
<tr>
<td>K</td>
<td>-11</td>
<td>1900</td>
<td>350</td>
</tr>
<tr>
<td>L</td>
<td>-12</td>
<td>1902</td>
<td>400</td>
</tr>
</tbody>
</table>

**Note:**

1. All wells have 12-inch casing but casing depths and length of perforated sections, if any, are not known.

2. The source of information is Stearns & Vaksvik (1938:191-192). The battery of wells is listed as Nos. 331A to T.

3. Well B is presently disconnected from the manifold system. According to plantation personnel, the valve separating the 3A and 3B wells is open so that Pump 3A draws water from all 19 of the other wells in the battery.
From "Plan of Pump-3 Wells" by John Duarte, July 22, 1920

Exhibit 3
Layout of Well Nos. 3505-01 to -20 and WSCO Pumps 3A and 3B
Dear Mr. Tam:

The following is in response to your letter dated August 9th, 2011, regarding water use permits 894 & 895 (Pumps 3 & 8).

With the recent transfer of the water use permits to Kamehameha Schools (KS), we have contracted a third party to monitor Pumps 3 & 8 per CWRM requirements. Attached are the monthly reports beginning June of this year.

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Please feel free to call me if you have any questions or if you would like to discuss this matter further.

Sincerely,

‘Imla Lindsey, PE
Kamehameha Schools LAD
Photo 1. Improved Wells “B” & “C”, piping at ground level

Photo 2. Cross country ditch lined with new pipe for efficient transmission of water
Photo 3. Fully functional central filtration station sized for 6 mgd

Photo 4. Improved Opae`ula 1 reservoir, main storage for surface water
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<table>
<thead>
<tr>
<th>Well No.</th>
<th>Company Name</th>
<th>Date 1</th>
<th>Date 2</th>
<th>Pumpage</th>
<th>Meter Type</th>
<th>Flow Rate</th>
<th>Temperature</th>
<th>Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>3506-03</td>
<td>Opaeula Pump 3 Battery</td>
<td>05/24/11</td>
<td>07/01/11</td>
<td>20,552,076</td>
<td>Flow Meter</td>
<td>100</td>
<td>70°</td>
<td>10.3'</td>
</tr>
<tr>
<td>3506-01</td>
<td>Opaeula Pump 8 Battery</td>
<td>05/20/11</td>
<td>07/01/11</td>
<td>13,622,000</td>
<td>Flow Meter</td>
<td>75</td>
<td>70°</td>
<td>10.1'</td>
</tr>
</tbody>
</table>

* Flow meter, electrical consumption, weir or flume, not metered (estimated).
** Measurement should be taken while pump is NOT running just prior to a pumping cycle; if measurement is taken while pump is running, please indicate so.

Other comments or additional information (e.g., date and method of chloride measurement, how pumpage amounts are estimated, etc.):

Submitted by (print):  
Signature: 
Date: 

Title: ___________________________

GWUR-MON FORM (06/10/2004)
NAME: ____________________________
COMPANY: ________________________
ADDRESS: _________________________

Telephone No.: ____________________ Fax No.: _______________________
Report Month: _____________________ Year: _______________________

INSTRUCTIONS: Please TYPE OR PRINT CLEARLY. Complete this form to report total monthly ground water use, and, if required, other information from each of your well sources. Mail to: Commission on Water Resource Management, P.O. Box 621, Honolulu, HI 96809. For assistance, please call. For Official Use Only:

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<tr>
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<th>Well Name</th>
<th>Period Begin Date (mm/dd/yyyy)</th>
<th>Period End Date (mm/dd/yyyy)</th>
<th>Quantity Pumped (gallons)</th>
<th>Method of Measurement*</th>
<th>Chloride (mg/l)</th>
<th>Temp. (°F)</th>
<th>Non-Pumping Water Level (ft. above me)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3S05-02</td>
<td>OPAEULA PUMPS</td>
<td>07/01/11</td>
<td>07/27/11</td>
<td>28,192,522</td>
<td>FLOW METER</td>
<td>40</td>
<td>73</td>
<td>10.2'</td>
</tr>
<tr>
<td>3S06-03</td>
<td>BATTERY</td>
<td>07/01/11</td>
<td>07/27/11</td>
<td>13,918,000</td>
<td>FLOW METER</td>
<td>85</td>
<td>73</td>
<td>10.3'</td>
</tr>
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** Measurement should be taken while pump is NOT running just prior to a pumping cycle; If measurement is taken while pump is running, please indicate so.

Other comments or additional information (e.g., date and method of chloride measurement, how pumpage amounts are estimated, etc.):

Submitted by (print): SID KENT 8/1/11  Title: ________________________________

Signature: __________________________ Date: ________________________________
INSTRUCTIONS: Please TYPE OR PRINT CLEARLY. Complete this form to report total monthly ground water use, and, if required, other information from each of your well sources. Mail to: Commission on Water Resource Management, P.O. Box 621, Honolulu, HI 96809. For assistance, please call [phone number].

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<tbody>
<tr>
<td>3520-03-20</td>
<td>OPAEULA PUMP 3 BRAN TORY</td>
<td>07/27/11</td>
<td>8/31/11</td>
<td>27,404,000</td>
<td>Flowmeter</td>
<td>40</td>
<td>72</td>
<td>10.3'</td>
</tr>
<tr>
<td>3526-03-20</td>
<td>OPAEULA PUMP 3 BATTERY</td>
<td>07/27/11</td>
<td>8/31/11</td>
<td>10,070,000</td>
<td>Flowmeter</td>
<td>90</td>
<td>79</td>
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* Flow meter, electrical consumption, weir or flume, not metered (estimated).
** Measurement should be taken while pump is NOT running just prior to a pumping cycle; if measurement is taken while pump is running, please indicate so.

Other comments or additional information:

Submitted by (print): S l o k e n t  8/1/11

Signature: ___________________________ Date: ___________________________
A major problem, to me, is the incomplete record surrounding the WUPs approved 6/2/93 — virtually no documentation at the time. A supplementary meeting handout ("Additional Recommendations") identifies 3 pump batteries for specific reductions — no WUPs, and the folders do not reflect WUPs. The DB tracks it, but misidentifies the transfer date of WSC 137 to KS 894, while maintaining allocations for well sealed and revoked Sept. 2002. The "approval" for other WSCo batteries has no reference in the submitted or minutes of 6/2/93. Hopefully, we can straighten it out now.
August 9, 2011

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Kaeo Duarte
Kamehameha Schools
567 South King Street, Suite 200
Honolulu, HI 96813

Dear Mr. Duarte:

20-Year Water Use Permit Review and Current Water Use Reporting

Your Water Use Permit Nos. 894 & 895 for the amounts of 1.552 mgd and 1.660 mgd, respectively, from “Pump 3” battery (Well Nos. 3505-01 to -18) and “Pump 8” (Well No. 3506-03) were approved as transfers from Waialua Sugar Company by the Commission on Water Resource Management (Commission) on July 7, 2010. As part of our recent 20-year review of water use permits, required by the State Water Code, we note that there is no reporting of water use from these wells, as required by your permit.

Unused water that has been previously allocated is subject to revocation in accordance with Hawaii Revised Statutes §174C-58(4) and standard water use permit condition #15:

After a hearing, the commission may suspend or revoke a permit for:
Partial or total nonuse, for reasons other than conservation, of the water allowed by the permit for a period of four continuous years or more.

Please transmit water use reports for the period under your control, and indicate if you are willing to voluntarily relinquish any of your 4-year unused amount. If you are not willing to voluntarily relinquish any amount, please explain why any unused amount should not be revoked by the Commission (after a hearing).

Please respond in writing no later than 30 days from the date of this letter.

If you have any questions, please contact Charley Ice of our staff at

Sincerely,

WILLIAM M. TAM
Deputy Director
July 7, 2010

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Imiola Lindsey
Kamehameha Schools
78-6831 Alii Drive, Suite 235
Kailua-Kona, HI 96740

Dear Mr. Lindsey:

Transfer of Water Use Permit (WUP No. 137 to WUP No. 894) for Well No. 3505-01 to -20
Waialua Ground-Water Management Area, Oahu

We have received your Request to Transfer Water Use Permit for the subject well. Please note that as part of the transfer process, we have assigned a new Water Use Permit Number for this well. This is for record keeping purposes only and voids and supercedes the previous Water Use Permit Number listed above. As provided by law, your notice of transfer simply notifies us of the transfer of the permit and does not create any new rights and liabilities in favor of or against the transferee.

This letter transmits your water use permit for Opaeka'a Pump 3 Well Battery (Well Nos. 3505-01 to -20) for use of 1.552 million gallons per day (mgd) of water on a 12-month moving average basis that was approved by the Commission on Water Resource Management (Commission) on June 2, 1993. As part of the Commission's approval, the following special conditions were added and are part of your permit under Standard Permit Condition 19:

**Special Conditions**

1. Should an alternate permanent source of water be found for this use, then the Commission reserves the right to revoke this permit, after a hearing.

2. In the event that the tax map key at the location of the water use is changed, the permittee shall notify the Commission in writing of the tax map key change within thirty (30) days after the permittee receives notice of the tax map key change.

Enclosed with this letter of approval are the following:

1. Your water use permit
2. Your official monthly water use report form
Please be sure to read the conditions of your approved permit.

We draw your attention to two key conditions of your permit that require your response. First, you are required to keep a record of your monthly total pumpage, water level, salinity, and water temperature. This information must be submitted to the Commission on a regular monthly basis using the enclosed water use report form. You should make copies of the enclosed report form as needed.

Second, you are required to submit a water shortage plan to the Commission within thirty (30) days of the issuance date of this permit. Your water shortage plan simply identifies what you are willing to do should the Commission declare a water shortage situation in the Waialua Ground-Water Management Area and can be as short as a one page letter. In a water shortage situation, the Commission may require temporary reductions in pumpage from all sources. The Commission is required, by law, to formulate a plan to implement such area-wide reductions, which should accommodate, include, and be consistent with your plans. Therefore, your help, by submiting your water shortage plan, is greatly needed in formulating the Commission's overall Water Shortage Plan.

If you have any questions, please call Charley Ice of the Commission staff at [redacted]

Sincerely,

LAURA H. THIELEN
Chairperson

Attachments: WUR Form

c: Honolulu BWS
GROUND-WATER USE PERMIT
WUP NO. 894

PERMITTEE

<table>
<thead>
<tr>
<th>Permittee/Water User</th>
<th>Landowner of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>Address</td>
</tr>
<tr>
<td>Kamehameha Schools</td>
<td>Kamehameha Schools</td>
</tr>
<tr>
<td>78-6831 Alii Drive, Suite 235</td>
<td>78-6831 Alii Drive, Suite 235</td>
</tr>
<tr>
<td>Kailua-Kona, HI 96740</td>
<td>Kailua-Kona, HI 96740</td>
</tr>
</tbody>
</table>

PERMITTED SOURCE INFORMATION

<table>
<thead>
<tr>
<th>Island</th>
<th>Oahu</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Management Area</td>
<td>North</td>
</tr>
<tr>
<td>Aquifer Sector</td>
<td>Waialua</td>
</tr>
<tr>
<td>Aquifer System</td>
<td></td>
</tr>
<tr>
<td>System Sustainable Yield</td>
<td>25</td>
</tr>
<tr>
<td>Well Name</td>
<td>Opaeula Pump 3</td>
</tr>
<tr>
<td>State Well No.</td>
<td>3505-01 to -20</td>
</tr>
</tbody>
</table>

PERMITTED USE INFORMATION

<table>
<thead>
<tr>
<th>Reasonable beneficial use</th>
<th>Agriculture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Withdrawal (12 month moving ave.)</td>
<td>1.552 mgd</td>
</tr>
<tr>
<td>Location of water use</td>
<td></td>
</tr>
<tr>
<td>TMK #</td>
<td>(1) 6-2-010:001</td>
</tr>
<tr>
<td>State land use classification</td>
<td>AG</td>
</tr>
<tr>
<td>County zoning classification</td>
<td>Ag1 - P</td>
</tr>
</tbody>
</table>

Pursuant to Hawaii's State Constitution, Article XI, Section 7, Hawaii Revised Statutes, Chapter 174C; Hawaii Administrative Rules, Chapters 13-167 through 13-171; and Hawaii decisional law and custom, the permittee is hereby authorized to use ground water from the sources and in the amount and from and upon the locations described above; subject however, to the requirements of law including but not limited to the following conditions:
1. The water described in this water use permit may only be taken from the location described and used for the reasonable beneficial use described at the location described above. Reasonable beneficial uses means "the use of water in such a quantity as is necessary for economic and efficient utilization which is both reasonable and consistent with State and County land use plans and the public interest." (HRS § 174C-3)

2. The right to use ground water is a shared use right.

3. The water use must at all times meet the requirements set forth in HRS § 174C-49(a), which means that it:
   a. Can be accommodated with the available water source;
   b. Is a reasonable-beneficial use as defined in HRS § 174C-3;
   c. Will not interfere with any existing legal use of water;
   d. Is consistent with the public interest;
   e. Is consistent with State and County general plans and land use designations;
   f. Is consistent with County land use plans and policies; and
   g. Will not interfere with the rights of the Department of Hawaiian Home Lands as provided in section 221 of the Hawaiian Homes Commission Act and HRS § 174C-101(a).

4. The ground-water use here must not interfere with surface or other ground-water rights or reservations.

5. The ground-water use here must not interfere with interim or permanent instream flow standards. If it does, then:
   a. A separate water use permit for surface water must be obtained in the case an area is also designated as a surface water management area;
   b. The interim or permanent instream flow standard, as applicable, must be amended.

6. The water use authorized here is subject to the requirements of the Hawaiian Homes Commission Act, as amended, if applicable.

7. The water use permit application and submittal, as amended, approved by the Commission at its June 2, 1993 meeting are incorporated into this permit by reference.

8. Any modification of the permit terms, conditions, or uses may only be made with the express written consent of the Commission.

9. This permit may be modified by the Commission and the amount of water initially granted to the permittee may be reduced if the Commission determines it is necessary to:
   a. protect the water sources (quantity or quality);
   b. meet other legal obligations including other correlative rights;
   c. insure adequate conservation measures;
   d. require efficiency of water uses;
   e. reserve water for future uses, provided that all legal existing uses of water as of June, 1987 shall be protected;
   f. meet legal obligations to the Department of Hawaiian Home Lands, if applicable; or
   g. carry out such other necessary and proper exercise of the State's and the Commission's police powers under law as may be required.

Prior to any reduction, the Commission shall give notice of its proposed action to the permittee and provide the permittee an opportunity to be heard.

10. An approved flowmeter(s) must be installed to measure monthly withdrawals and a monthly record of withdrawals, salinity, temperature, and pumping times must be kept and reported to the Commission on Water Resource Management on forms provided by the Commission on a monthly basis (attached).
11. This permit shall be subject to the Commission's periodic review of the Waialua Aquifer System's sustainable yield. The amount of water authorized by this permit may be reduced by the Commission if the sustainable yield of the Waialua Aquifer System, or relevant modified aquifer(s), is reduced.

12. A permit may be transferred, in whole or in part, from the permittee to another, if:
   a. The conditions of use of the permit, including, but not limited to, place, quantity, and purpose of the use, remain the same; and
   b. The Commission is informed of the transfer within ninety days.

Failure to inform the department of the transfer invalidates the transfer and constitutes a ground for revocation of the permit. A transfer, which involves a change in any condition of the permit, including a change in use covered in HRS § 174C-57, is also invalid and constitutes a ground for revocation.

13. The use(s) authorized by law and by this permit do not constitute ownership rights.

14. The permittee shall request modification of the permit as necessary to comply with all applicable laws, rules, and ordinances that will affect the permittee's water use.

15. The permittee understands that under HRS § 174C-58(4), that partial or total nonuse, for reasons other than conservation, of the water allowed by this permit for a period of four (4) continuous years or more may result in a permanent revocation as to the amount of water not in use. The Commission and the permittee may enter into a written agreement that, for reasons satisfactory to the Commission, any period of nonuse may not apply towards the four-year period. Any period of nonuse which is caused by a declaration of water shortage pursuant to section HRS § 174C-62 shall not apply towards the four-year period of forfeiture.

16. The permittee shall prepare and submit a water shortage plan within 30 days of the issuance of this permit as required by HAR § 13-171-42(c). The permittee's water shortage plan shall identify what the permittee is willing to do should the Commission declare a water shortage in the Waialua Ground-Water Management Area.

17. The water use permit shall be subject to the Commission's establishment of instream standards and policies relating to the Stream Protection and Management (SPAM) program, as well as legislative mandates to protect stream resources.

18. The permittee understands that any willful violation of any of the above conditions or any provisions of HRS § 174C or HAR § 13-171 may result in the suspension or revocation of this permit.

19. Special conditions in the attached cover transmittal letter are incorporated herein by reference.

LAURA H. THIELEN, Chairperson
Commission on Water Resource Management

Attachment
**FROM:** CHARLEY  
**DATE:** 20-May-10  
**SUSPENSE DATE:** 27-May-10

<table>
<thead>
<tr>
<th>TO:</th>
<th>INIT.</th>
<th>TO:</th>
<th>INIT.</th>
<th>FOR:</th>
<th>PLEASE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>FUJII, N.</td>
<td></td>
<td>KUNIMURA, I.</td>
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<td>1 Approval</td>
<td>See Me</td>
</tr>
<tr>
<td>HARDY, R.</td>
<td>1</td>
<td>NAKAMA, L.</td>
<td></td>
<td>3 Signature</td>
<td>1 Review &amp; Comment</td>
</tr>
<tr>
<td>ICE, C.</td>
<td>2</td>
<td>UYENO, D.</td>
<td></td>
<td>4 Information</td>
<td>Take Action</td>
</tr>
<tr>
<td>MATSUKAWA, R.</td>
<td></td>
<td>YODA, K.</td>
<td></td>
<td></td>
<td>Type Draft acknow letter</td>
</tr>
<tr>
<td>KAWAHARA, K.</td>
<td></td>
<td>YOSHINAGA, M.</td>
<td></td>
<td></td>
<td>2 Type Final, label file folder, update People.db</td>
</tr>
</tbody>
</table>

**PLEASE:**
1. Review & Comment
2. Type Final, label file folder, update People.db
3. File & Input Issue Date
4. Xerox copies

**WELL NUMBER** 3505-01to20  
**WELL NAME** Pump 3  
**WUP Number** Old=137/ New= 894

**ATTACHMENTS FOR APPLICATION PROCESSING** - Both applicant & staff generated

1. TRANS. LETTER
2. PERMIT PROCESS TABLE
3. CWRM MAPS
4. APPL. FORM (11 COPIES)
5. USGS MAPS (11 COPIES)
6. TAX MAPS (11 COPIES)
7. PARCEL OWNER VERIF.
8. CONTRACTOR VERIF.
9. ALL INFO FILLED IN
10. BACKGROUND CHECK
11. $25 FEE DEPOSIT SLIP
12. DHP/CDUP/SMA pre-screen

**FOLDER:**
- MADE NEW FILE FOLDER, ATTACHED
- FILE FOLDER ALREADY MADE, IN FILE CABINET

**INCOMPLETE ACTION DATES:**

<table>
<thead>
<tr>
<th>DATE</th>
<th>ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consistency of Pump 3 well certification</td>
</tr>
<tr>
<td></td>
<td>TMK changed?</td>
</tr>
<tr>
<td></td>
<td>Also, WUP SA 3506-03 104 (Backflow or transfer)</td>
</tr>
</tbody>
</table>
The attached shows our ag field boundaries. We do not currently have infrastructure to irrigate all fields (Pumps 3 & 8) but are working towards implementing this.

Surface water sources combine with the pump 3 water, so it is difficult to say how much of each is going where. The majority of the Pump 3 water is used on the Opaeula fields closest to the pump (right hand side of map) and only when there is not enough surface water. Pump 3's 1.5 mgd is an essential back-up during dry times. Pump 8 is the sole source for our fields in Paalaa.

We have a projected demand for the larger (2,400 acre) area of 6 mgd. This map reflects our long range footprint for this ag water system.

Imiola Lindsey, PE

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From: Charley.F.Ice@hawaii.gov [mailto:Charley.F.Ice@hawaii.gov]
Sent: Tuesday, June 29, 2010 1:15 PM
To: dan.nellis@dole.com; Imiola Lindsey
Subject: irrigation footprint

We are trying to complete your request to transfer water use permits 137 for Opaeula Pump 3 Battery and WUP #54 for Pump 8. Because of multiple sources and changing uses, our need to make proper accounting of water use now requires establishing a footprint for each source's uses. While we have TMK maps showing vast swaths of agricultural land as "use" areas, nothing identifies the specific areas to be irrigated by these sources. Please provide a simple map showing the areas to be irrigated by these sources. It is understood that some areas to be considered eligible for use under these permits may be fallow at any one time. The information needed is the acreage to be irrigated and the boundaries within which irrigation will occur. Areas outside the boundaries may still fall within the same TMK tract, but not be the subject of this permit. Water use reporting to follow should indicate acreage irrigation and acreage fallowed, understanding that these numbers will change through the tenure of these permits.
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We are trying to complete your request to transfer water use permits 137 for Opaeula Pump 3 Battery and WUP #54 for Pump 8. Because of multiple sources and changing uses, our need to make proper accounting of water use now requires establishing a footprint for each source’s uses. While we have TMK maps showing vast swaths of agricultural land as “use” areas, nothing identifies the specific areas to be irrigated by these sources. Please provide a simple map showing the areas to be irrigated by these sources. It is understood that some areas to be considered eligible for use under these permits may be fallow at any one time. The information needed is the acreage to be irrigated and the boundaries within which irrigation will occur. Areas outside the boundaries may still fall within the same TMK tract, but not be the subject of this permit. Water use reporting to follow should indicate acreage irrigation and acreage fallowed, understanding that these numbers will change through the tenure of these permits.

Charley Ice
Hydrologist
Hawaii Water Commission
1151 Punchbowl 227 Kalanimoku
P.O. Box 621, Honolulu 96809
I have it (to Roy already -- I caught a couple of typos already)  
I'll take the transfer.

Roy Hardy/DLNR/StateHiUS

I'm still trying to figure out which of you I gave the WCR2 for Pump 3 B&C recently. Which ever one of you who got it please take care of this transfer as well. Thanks.

--- Forwarded by Roy Hardy/DLNR/StateHiUS on 05/20/2010 01:46 PM ---

Roy, thanks again for your assistance. Please note, I was off by 4 years, the lease was surrendered April 1, 1999.

The transfer will be effectuated on today's date but for the record it should show when KSBE effectively took over in 1995.
To
Roy.Hardy@hawaii.gov
cc
Subject
Re: WUP Issued to Waialua Sugar Company

Whoops.. Thought that was for you guys. Do we use todays date or the date the lease was handed back (sometime in 1995)? Thanks!

Sent via BlackBerry by AT&T

From: <Roy.Hardy@hawaii.gov>
Date: Wed, 19 May 2010 08:45:24 -1000
To: Imiola Lindsey<imlindse@ksbe.edu>; <Ken.C.Kawahara@hawaii.gov>
Cc: Thomas Kaeo Duarte<kaduarte@ksbe.edu>
Subject: RE: WUP Issued to Waialua Sugar Company

Thanks Imi. Do you know the effective date of transfer? (it's blank on the form).

Imiola Lindsey <imlindse@ksbe.edu>
05/19/2010 08:41 AM

To
<Ken.C.Kawahara@hawaii.gov>, <roy.hardy@hawaii.gov>
cc
"Thomas Kaeo Duarte" <kaduarte@ksbe.edu>
Subject
RE: WUP Issued to Waialua Sugar Company

Aloha Ken/Roy,

Please find the attached signed WUP for Pumps 3 & 8 (formerly WSCo). We can mail the original copy if needed. Thanks again for all your patience, we made every effort to get these signatures expeditiously.

Per Roy's request, we are also getting our monthly reporting in order for Pumps 3 & 8. Part of the well improvements was to install water level measurement devices at Pump 3 (this was not possible before). So in the coming month we will be getting you our pumpage, water level and chlorides data for Pumps 3, and pumpage/chlorides readings for Pump 8. We also might be able to get together the past pumpage data for both, if that is helpful.

Thanks again!
Imi
Thanks Ken and Roy, this is very much appreciated.

The recent BWS request is tied to ag processing facilities we are proposing in Kawailoa, for crop washing using potable water (to satisfy food safety requirements by supermarkets and such). The allocations from pump 3 & 8 are consumed entirely by agricultural irrigation and the water is non-potable.

We'll inform our Haleiwa land manager about the water use reporting, and facilitate these reports to your staff.

Thanks again for a little more time on this

Aloha Imiloa,

Thank you for your email and additional information regarding the transfer. Although it should be done within 90 days, we will allow you a little more time (per your request below) on getting the signatures for the transfer. I am not sure if you are aware that Honolulu BWS is coming in for more water in the area. It is important that KS gets the water use reporting up to date (as well as the transfer) as we may have to start revoking any unused allocations.

Thanks again.

Ken
Aloha Ken,

I have just received your letter dated April 22, 2010, regarding the water use permit for Pumps 3 & 8, located on the KS Haleiwa lands (formerly leased to Waialua Sugar (WSC)).

After Roy identified our need for a current WUP in September, the KS land manager responsible for this area offered her assistance in getting the transfer form signed by an officer of WSC. And we want to assure you that we have not forgotten about this commitment, and the responsible land manager has been pursuing the signatures for this transfer for the last 8 months.

If we are able to get a WUP transfer form properly filed for pumps 3 & 8, will this be sufficient for transferring the allocation once held by WSC to Kamehameha Schools? If so, would you allow us just a few more weeks to obtain the necessary signatures, before we are required to pursue a new application for a WUP?

We would like you to note that these wells have been in continuous operation (no lapse in service) since the lease was surrendered back to KS and we took over operation of the plantation. The recent well work and communication with your office is all part of the extensive planning, design and construction activities KS is undertaking on the North Shore to repurpose those lands for a new era of agriculture following the demise of sugar. The sources in question have been essential to keeping these lands open to agriculture since the close of the plantation and they remain vital for local ag. As you know, they are invaluable for maintaining production, especially through the summer months when surface water is limited or at times non-existent. KS has recently put forth a statewide ag strategy, which will put even more emphasis on our farmable land in Haleiwa (around 2,200 acres, formerly in sugar, intended for diversified ag).

It has been great working with Roy to update the permits and documentation on these wells, and we look forward to continue working with CWRM as KS becomes a more active manager of former plantation lands and systems. We are committed to being a responsible water user, for compliance with the Water Code as well as our own organizational values. It is a complex and costly effort to try and create a new era of productive ag on former plantation lands, and we appreciate your patience and understanding.

Sincerely, Imiola

Imiola Lindsey, PE
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e-mail or contact Kamehameha Schools at [mask] and then delete this
message from your system.

[attachment "WUP_signed2.pdf" deleted by Roy Hardy/DLNR/StateHiUS] <
mailto:webmaster@ksbe.edu>

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message from your system.

WUP_signed.pdf
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
REQUEST TO TRANSFER WATER USE PERMIT

Instructions: Please print in ink or type and send completed application to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. The Commission may not accept incomplete applications. For assistance, call the Regulation Branch at (808) 586-6060. For further information and updates to this application form, visit http://www.hawaii.gov/dlnr/cwrm.

CURRENT PERMIT HOLDER:

1. (a) PERMITTEE
   Firm/Name: Waialua Sugar Co
   Contact Person: Dennis Nelson
   Address: 114 Whitmore Avenue, Waialua
   Phone: 808-621-9000
   Fax: 808-621-7010
   E-mail: dnelson@wscp.com

   Signature: ____________________________
   Date: 5/17/10

(b) LANDOWNER OF SOURCE
   Firm/Name: Kamehameha Schools
   Contact Person: Imiola Lindsey
   Address: 567 South King Street, Suite 200, Honolulu HI 96813
   Phone: (808) 523-6200
   Fax: ____________
   E-mail: imlinde@ksbe.edu

   Signature: ____________________________
   Date: 5/19/10

PERMIT TO BE TRANSFERRED (CHECK ONE ONLY) ☒ IN ENTIRETY or ☐ IN PART BY GPD

TO:

2. (a) PERMITTEE
   Firm/Name: Kamehameha Schools
   Contact Person: Imiola Lindsey
   Address: 567 South King Street, Suite 200, Honolulu HI 96813
   Phone: ____________
   Fax: (808) 541-5305
   E-mail: imlinde@ksbe.edu

   Signature: ____________________________
   Date: 5/19/10

(b) LANDOWNER OF SOURCE
   Firm/Name: Kamehameha Schools
   Contact Person: Imiola Lindsey
   Address: 567 South King Street, Suite 200, Honolulu HI 96813
   Phone: ____________
   Fax: ____________
   E-mail: imlinde@ksbe.edu

   Signature: ____________________________
   Date: 5/19/10

WATER USE PERMIT TRANSFER INFORMATION

3. WATER USE PERMIT NO.: 137
   EFFECTIVE DATE OF TRANSFER: 4/1/99

4. WELL/STREAM DIVERSION NAME AND STATE NUMBER: Opaeula Pump 3 Battery (State # 3505-001 to 020)

5. T.M.K. AT SOURCE: 6-2-010:001

6. END USE T.M.K.: 6-2-010:001

WUP TRANSFER REQUEST FORM (10/21/2008)
State of Hawaii  
COMMISSION ON WATER RESOURCE MANAGEMENT  
Department of Land and Natural Resources  
REQUEST TO TRANSFER WATER USE PERMIT  
☐ Groundwater or ☐ Surface Water

Instructions: Please print in ink or type and send completed application to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. The Commission may not accept incomplete applications. For assistance, call the Regulation Branch at 587-0225. For further information and updates to this application form, visit http://www.hawaii.gov/dlnr/cwrm.

CURRENT PERMIT HOLDER:

1. (a) PERMITTEE  
   Firm/Name: Waialua Sugar Co  
   Contact Person: Nellis  
   Address: 1110 Whitmore Ave Wahiawa  
   Phone: 808-621-3420  
   Fax: 808-621-7410  
   E-mail: nellis@wailua.com

   (b) LANDOWNER OF SOURCE  
   Firm/Name: Kamehameha Schools  
   Contact Person: Imiola Lindsey  
   Address: 567 South King Street, Suite 200, Honolulu HI 96813  
   Phone: 808-587-0150  
   Fax: 808-587-0225  
   E-mail: imiola@ksbe.edu

Signing below indicates that the signature understands and have no objection to this water use permit transfer request.

Signature: ___________________________  
Date: 5/19/10

PERMIT TO BE TRANSFERRED (CHECK ONE ONLY) ☒ IN ENTIRETY or ☐ IN PART BY _________ GPD

TO:

2. (a) PERMITTEE  
   Firm/Name: Kamehameha Schools  
   Contact Person: Imiola Lindsey  
   Address: 567 South King Street, Suite 200, Honolulu HI 96813  
   Phone: 808-587-0150  
   Fax: 808-587-0225  
   E-mail: imiola@ksbe.edu

   (b) LANDOWNER OF SOURCE  
   Firm/Name: Kamehameha Schools  
   Contact Person: Imiola Lindsey  
   Address: 567 South King Street, Suite 200, Honolulu HI 96813  
   Phone: 808-587-0150  
   Fax: 808-587-0225  
   E-mail: imiola@ksbe.edu

Signing below indicates that the signatories swear that: 1) the conditions of use of the transferred permit including place, quantity, and purpose of the use remain the same. I also understand that a new water use permit will be issued to document this transfer and the old water use permit and number will be void and superseded.

Signature: ___________________________  
Date: 5/19/10

Signature: ___________________________  
Date: 5/19/10

WATER USE PERMIT TRANSFER INFORMATION

3. WATER USE PERMIT NO.: 54  
   EFFECTIVE DATE OF TRANSFER: 4/1/99

4. WELL/STREAM DIVERSION NAME AND STATE NUMBER: Pump 8 (State # 3506-003 and 004)

5. T.M.K. AT SOURCE  
   6-2-006:007

6. END USE T.M.K.  
   6-2-006:007

WUP TRANSFER REQUEST FORM (10/21/2008)
Mr. Imiola Lindsey  
Kamehameha Schools  
567 South King Street, Suite 200  
Honolulu, HI 96813  

Dear Mr. Lindsey:

Current Use of Ground Water from Waialua Aquifer System  
Water Use Permits Issued to Waialua Sugar Company

We understand that ownership of wells formerly operated by Waialua Sugar Company have been transferred to Kamehameha Schools. There is also a need to transfer the water use permits (WUP) associated with these wells. At a meeting with Roy Hardy of our staff on September 24, 2009 regarding modification details of the Pump 3 battery, it was mentioned that WUP transfers would be required. We have not received any such transfer request to date.

Additionally, because the Water Code provides that four years of non-use is grounds for revocation of the allocation in the water use permit, we request your assistance in determining the proper disposition of these allocations. These are the WUPs and respective well numbers and names:

<table>
<thead>
<tr>
<th>WUP No.</th>
<th>Well No.</th>
<th>Well Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>054</td>
<td>3506-03 &amp;-04</td>
<td>Pump 8 battery</td>
</tr>
<tr>
<td>137</td>
<td>3505-01 to -20</td>
<td>Pump 3 battery</td>
</tr>
</tbody>
</table>

If you have limited reasonable and beneficial use, please identify the amount and purpose of use, using our water use permit application form. Following the normal review, we will issue you new permits accordingly. We will ask the Commission to revoke allocations with no current or planned use, making them available for other users. Additional amounts that may be required in the future may be applied for at any time using the water use application form.

If you have any questions, please contact Charley Ice of our staff at [redacted].

Sincerely,

KEN C. KAWAHARA, P.E.
Deputy Director

Ci:ss  
Attachment
MINUTES OF THE MAY 19, 1993 MEETING

Unanimously approved as submitted (Cox/Nakata).

OLD BUSINESS/REPORTS

Ms. Loui reported on two follow up items:

1) Guidelines for modification of the water use permits
   Staff finds that Administrative Rules 171-23 are clear regarding changes
   that require modification. Therefore, it was felt that guidelines are not
   necessary.

2) Guidelines for Emergency permits
   Still being worked on. Eventually, amendments to the Administrative
   Rules will be made to more clearly address emergency permits.

WAIALUA SUGAR COMPANY, VOLUNTARY REDUCTION OF PERMITTED WATER USE IN THE WAIALUA GROUND WATER MANAGEMENT AREA, WAIALUA, OAHU

Mr. Sakoda submitted amended recommendations for the Commission review and action (see attached).

Mr. Cox had the following questions:

1) Are the statements regarding "dry years and "wet years" correct for that
   area and time?
   Rainfall data provided by Climate Center was utilized, it was jointly
   determined that these were wet and dry years based on actual rainfall
   information.

2) In terms of the water level in the aquifer, what has happened during the
   periods noted?
   The water level data for the Waialua Aquifer is not that good. No
   problems have been expressed. USGS is drilling in that area to get more
   data.

3) What length of time is being discussed in Waialua Sugar Company's
   (Waialua Sugar) statement: "We cannot afford to short ourselves of water.
   As we understand, we can exceed the permitted use during dry periods as
   may be required."
   No specifics have been set, it would be on a case by case basis.

Mr. Nakata asked:

1) Why was there a discrepancy in the amount of pumpage?
   Mr. Sakoda replied that Waialua Sugar was still in the process of
   converting from furrow to drip. During that time, fields lie fallow longer
   than normal.

2) What percentage of the acreage was under drip irrigation?
Milton Agadar, Waialua Sugar Irrigation Superintendent stated that approximately 90% is fed by drip irrigation from the Waialua Aquifer.

Mr. Martin provided testimony (see Commission file) urging the Commission to review all data presently available and consider imposing further allocation reductions. He also felt specific quantitative guidelines and protocols for administering dry period extractions need to be part of the State Water Resource Protection Plan and water use permit conditions.

Mr. Cox commented that unless more information was available he would be uncomfortable in trying set a time for the dry period because it would vary considerably from aquifer to aquifer. Mr. Sakoda agreed that a generalized guideline would be difficult to make because every situation would be different.

In regards to the word "voluntary", Mrs. Black suggested "agreement" because if there is no water, how could it be a "voluntary reduction". Mr. Sakoda stated that it is voluntary because the Water Code provides that a water user can voluntarily give up or reduce their allocation without going through the public hearing process.

Mr. Ing asked how the data was obtained for the graph and if all the active pumps were metered. Mr. Sakoda said data was submitted monthly by Waialua Sugar. Mr. Agadar responded that all the pumps are metered.

Mr. Ing asked why the 12-month moving average of pumping was used and if this was an industry practice. In Hawaii, 12-month moving averages have been used by the water industry.

Unanimously approved as amended (Cox/Nakata).

ITEM 4

HOUSING FINANCE AND DEVELOPMENT CORPORATION,
APPLICATION FOR A WELL CONSTRUCTION PERMIT, KEOPU-HFDC
WELL 1 (WELL NO. 3957-03), NORTH KONA, HAWAII

The following items were discussed:

1) The nearby Haseko Well is not being pumped but is proposed to be pumped at 700 gallons per minute.

2) This well would be required to follow the CWRM’s pump test protocol, which is a seven day test. The best data possible will be obtained for input into the Groundwater Model currently being developed jointly by USGS/CWRM.

3) If the HFDC wells interfere with the Haseko well, the Hawaii County BWS would not award the full amount of water commitments to the wells.

4) There have been mixed results of the testing of the high level wells. Some have stabilized quickly while others have not.

Mr. Martin expressed concerns regarding ceded lands, the effects on other wells due to a first come-first serve process, and requirements for a water license.

Mr. Tam said public lands are set aside by executive order for county and other state department uses. Setting aside or transferring water to a sub-agency of the state for public purposes is not a transfer to a private entity. Therefore, the use by the counties of state lands for providing municipal water supply does not require a license under the Land Board or the Commission.

Unanimously approved (Cox/Nakata).
Chairperson and Members
Commission on Water Resource Management
State of Hawaii
Honolulu, Hawaii

Gentlemen:

Additional Recommendations
Waialua Sugar Company
Voluntary Reduction of Permitted Water Use in the
Waialua Aquifer System, Waialua Ground Water Management Area
Waialua, Oahu

RECOMMENDATIONS:

1. That the Commission accept Waialua Sugar Company's voluntary reduction of permitted use in the Waialua Aquifer System, from 39.940 to 36.0 mgd, from the following sources:

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>WELL NUMBER</th>
<th>EXISTING ALLOCATION</th>
<th>PROPOSED ALLOCATION</th>
<th>REDUCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pump 3</td>
<td>3505-01 to 20</td>
<td>3.052 mgd</td>
<td>1.552 mgd</td>
<td>-1.500 mgd</td>
</tr>
<tr>
<td>Pump 7</td>
<td>3407-11, 12</td>
<td>3.750 mgd</td>
<td>2.930 mgd</td>
<td>-0.820 mgd</td>
</tr>
<tr>
<td>Pump 10</td>
<td>3306-01 to 12</td>
<td>6.620 mgd</td>
<td>5.000 mgd</td>
<td>-1.620 mgd</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>13.422 MGD</strong></td>
<td><strong>9.482 MGD</strong></td>
<td><strong>-3.940 MGD</strong></td>
<td></td>
</tr>
</tbody>
</table>

2. That the Commission consider giving Waialua Sugar Company priority to reobtain its permitted level of water usage over any other application should more water become available in the future. This recommendation is based on Section 13-171-19(d) of the Water Code administrative rules which states:

"A permitted user of water in an existing water management area, with a continuous reduced water usage, shall be given priority to reobtain its permitted level of water usage over any other application; provided that the use remains the same and is reasonable and beneficial and water is available".
Chairperson and Members  
Commission on Water Resource Management  
State of Hawaii  
Honolulu, Hawaii  

Gentlemen:

Waialua Sugar Company  
Voluntary Reduction of Permitted Water Use in the  
Waialua Aquifer System, Waialua Ground Water Management Area  
Waialua, Oahu

Background: Present authorized uses of ground water in the Waialua Aquifer System of the Waialua Ground Water Management Area (GWMA) total 43.114 mgd. The sustainable yield for the Waialua Aquifer System (formerly called the Waialua Subarea) was originally 60 mgd when the Board of Land and Natural Resources adopted the sustainable yield in July 1981. The Commission on Water Resource Management, in October 1991, accepted an updated table of sustainable yields for Oahu. Under the updated table, the sustainable yield for the Waialua Aquifer System was reduced from 60 mgd to 40 mgd. The new sustainable yield was formally adopted by the Commission on March 17, 1993. Authorized uses now exceed the sustainable yield by 3.114 mgd.

The Commission staff has reviewed the authorized uses versus the actual uses in the entire Waialua GWMA. Allocations in the Waialua Aquifer System are as follows:

<table>
<thead>
<tr>
<th>User</th>
<th>Allocation (mgd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waialua Sugar Company</td>
<td>39.940</td>
</tr>
<tr>
<td>Honolulu BWS</td>
<td>2.730</td>
</tr>
<tr>
<td>Private Users</td>
<td>0.444</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>43.114</strong> mgd</td>
</tr>
</tbody>
</table>

Preliminary review of Waialua Sugar Company’s pumpage data indicates that they have used less than 30 mgd of their 40 mgd allocation over the last five years (see attached graph). Water use by the Honolulu BWS and private users has not changed significantly.

Waialua Sugar Company calculated their irrigation requirements using the same methodology that Oahu Sugar Company used to determine their irrigation requirements in the Pearl Harbor area. Irrigation requirements were calculated for dry years (1983 - 1986) and wet years (1988 - 1991). Pumping required was calculated to be about 46 to 48 mgd for dry years and about 35 to 36 mgd for wet years.

Waialua Sugar Company has reviewed their water use over the past 20 years and, based on historical water use, conversion to drip irrigation, and other factors, has voluntarily reduced its permitted water use in the Waialua Aquifer System from 39.9 mgd to 36.0 mgd effective June 1, 1993. This voluntary reduction reduces the allocations in the Waialua Aquifer System to 39.174 mgd, which is less than the sustainable yield of 40 mgd, and allows an additional 0.826 mgd to be allocated.

In voluntarily reducing its allocation, Waialua Sugar Company states that they "want to be on record that sugar production is highly dependent upon water; without adequate water, yields will suffer. We cannot afford to short ourselves of water. As we understand, we can exceed the permitted use during dry periods as may be required" (See attached letter).
Chairperson and Members
Commission on Water Resource Management

June 2, 1993

RECOMMENDATION:

That the Commission accept Waialua Sugar Company's voluntary reduction of permitted use in the Waialua Aquifer System, from 39.940 to 36.0 mgd. The 3.94 mgd reduction will be taken from sources in the Waialua Aquifer System presently being determined by Waialua Sugar Company. Staff will be working with them to determine the source-by-source reductions and will bring the results to the Commission for approval.

Respectfully submitted,

RAE M. LOUI
Deputy Director

ATTACH.

APPROVED FOR SUBMITTAL

KEITH W. AHUE, Chairperson
WAIALUA AQUIFER SYSTEM
WSCO. Use Vs. Allocation

WUP = 39.940 mgd

11.418 mgd

----- monthly use  ---- 12-mon mov ave

months

1/80 1/82 1/84 1/86 1/88 1/90 1/92

mgd
May 12, 1993

Ms. Rae Loui  
Deputy Director  
State Water Commission  
P. O. Box 621  
Honolulu, Hawaii 96809

Dear Ms. Loui:

We have had several meetings over the past months to discuss Waialua Sugar Company's permitted water use from the Waialua aquifer. Waialua Sugar has a permitted use of 39.9 million gallons per day. When you add the permitted use of the City Water Department, you have a combined use which is higher than the sustainable yield.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Waialua Sugar Company</td>
<td>39.9</td>
</tr>
<tr>
<td>Board of Water Supply</td>
<td>3.2</td>
</tr>
<tr>
<td></td>
<td>43.1</td>
</tr>
</tbody>
</table>

Total Sustainable Yield: 40.0
Over Permitted Use: (3.1)

We have reviewed our water use over the past 20 years and while we have peaked at times over our permitted use, it appears we could reduce the permitted use given recent historical water use, conversion to drip irrigation and other factors.

Before going further, we want to be on record that sugar production is highly dependent upon water; without adequate water, yields will suffer. We cannot afford to short ourselves of water. As we understand, we can exceed the permitted use during dry periods as may be required.

Based on the above discussions and research into this matter, Waialua Sugar Company is voluntarily reducing its permitted water use in the Waialua aquifer from our current 39.9 million gallons per day to 36.0 million gallons per day effective June 1/93.

Sincerely,

Michael F. O'Brien  
President  
Dole Food Hawaii

cc: M. Agader  
    J. A. Russell  
    G. Yim
Chairperson and Members
Commission on Water Resource Management
State of Hawaii
Honolulu, Hawaii

Gentlemen:

Additional Recommendations
Waialua Sugar Company
Voluntary Reduction of Permitted Water Use in the
Waialua Aquifer System, Waialua Ground Water Management Area
Waialua, Oahu

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<td>1.552 mgd</td>
<td>-1.500 mgd</td>
</tr>
<tr>
<td>Pump 7</td>
<td>3407-11, 12</td>
<td>3.750 mgd</td>
<td>2.930 mgd</td>
<td>-0.082 mgd</td>
</tr>
<tr>
<td>Pump 10</td>
<td>3306-01 to 12</td>
<td>6.620 mgd</td>
<td>5.000 mgd</td>
<td>-1.620 mgd</td>
</tr>
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<td>-3.940 MGD</td>
</tr>
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"A permitted user of water in an existing water management area, with a continuous reduced water usage, shall be given priority to reobtain its permitted level of water usage over any other application; provided that the use remains the same and is reasonable and beneficial and water is available".
State of Hawaii  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
Division of Water and Land Development  
Honolulu, Hawaii  

September 11, 1981

Chairman and Members  
Board of Land and Natural Resources  
State of Hawaii  
Honolulu, Hawaii

Gentlemen:

Certification of Ground Water Withdrawals and Uses.  
Waialua Ground Water Control Area, Oahu

The Waialua Ground Water Control Area was designated by the Board of Land and Natural Resources on February 27, 1981 under authority of Chapter 177, EBS, and Chapter 186 of Title 13, Administrative Rules entitled "Rules for the Control of Ground Water Use in the State of Hawaii". The Department's regulatory procedures provide for water users to declare their existing water uses within a ninety-day period which ended June 4, 1981 and allows the Board 180 days to certify the declared uses.

The recommended certification of total annual, average daily, and maximum daily withdrawals for individual wells and/or well fields is tabulated in the attachment, "Certification of Ground Water Withdrawals and Uses, Waialua Ground Water Control Area", for the Waialua, Mokuleia, and Kawaino Subareas. A comparison of the recommended quantity for certification and the sustainable yield adopted by the Board on July 24, 1981 is tabulated below:

<table>
<thead>
<tr>
<th>Subarea</th>
<th>Sustainable Yield (mgd)</th>
<th>Recommended Certification (mgd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waialua</td>
<td>60</td>
<td>51.912</td>
</tr>
<tr>
<td>Mokuleia</td>
<td>20</td>
<td>7.753</td>
</tr>
<tr>
<td>Kawaino</td>
<td>10</td>
<td>5.360</td>
</tr>
</tbody>
</table>

The remaining ground water supplies may be withdrawn by obtaining permits from the Board of Land and Natural Resources.

RECOMMENDATION:

That the Board certify the existing withdrawals and uses for each well tabulated on the attached "Certification of Ground Water Withdrawals and Uses, Waialua Ground Water Control Area" dated September 11, 1981, subject to any special conditions and applicable laws, rules and regulations.

Respectfully submitted,

ROBERT T. CHEUCK  
Manager-Chief Engineer

attach.

APPROVED FOR SUBMITTAL:

SUSUMU OGO, Chairman

Approved by the Board of Land & Natural Resources at the meeting held on 9/10

C8
<table>
<thead>
<tr>
<th>Source/State Well No.</th>
<th>Total Wells</th>
<th>Source Use</th>
<th>Source Capacity (mgd)</th>
<th>5-yr. Avo. Withdrawal (mgd)</th>
<th>Withdrawal</th>
<th>Maximum Daily Use (mgd)</th>
<th>Total Annual Use (mgd)</th>
<th>Average Daily Use (mgd)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Waialua Subarea</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waialua Sugar Co.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pump 1 3407-01, 02</td>
<td>5</td>
<td>Agr.</td>
<td>6.0</td>
<td>2.33</td>
<td>Agr.</td>
<td>6.0</td>
<td>850.45</td>
<td>2.33</td>
</tr>
<tr>
<td>Pump 2 3395-01 to 06</td>
<td>9</td>
<td>Agr./Dom.</td>
<td>10.0</td>
<td>4.37</td>
<td>Agr./Dom.</td>
<td>10.0</td>
<td>1,595.05</td>
<td>4.37</td>
</tr>
<tr>
<td>Pump 2A 3397-07, 11 to 14</td>
<td>5</td>
<td>Agr./Dom.</td>
<td>7.0</td>
<td>4.45</td>
<td>Agr./Dom.</td>
<td>7.0</td>
<td>1,308.89</td>
<td>3.58</td>
</tr>
<tr>
<td>Pump 3 35-8-01 to 20</td>
<td>20</td>
<td>Agr./Dom.</td>
<td>7.0</td>
<td>3.16</td>
<td>Agr./Dom.</td>
<td>7.0</td>
<td>1,113.98</td>
<td>0.10</td>
</tr>
<tr>
<td>Pump 7 3407-11, 12, 19</td>
<td>4</td>
<td>Agr./Dom.</td>
<td>5.5</td>
<td>3.93</td>
<td>Agr./Dom.</td>
<td>5.5</td>
<td>65.78</td>
<td>0.18</td>
</tr>
<tr>
<td>Pump 8 3506-01 02</td>
<td>2</td>
<td>Agr./Dom.</td>
<td>3.0</td>
<td>1.66</td>
<td>Agr./Dom.</td>
<td>3.0</td>
<td>605.90</td>
<td>1.66</td>
</tr>
<tr>
<td>Pump 9 3506-02</td>
<td>1</td>
<td>Agr.</td>
<td>0.75</td>
<td>0.16</td>
<td>Agr.</td>
<td>0.75</td>
<td>58.4</td>
<td>0.16</td>
</tr>
<tr>
<td>Pump 10 3390-01 to 12</td>
<td>12</td>
<td>Agr.</td>
<td>12.0</td>
<td>6.62</td>
<td>Agr.</td>
<td>12.0</td>
<td>2,416.30</td>
<td>6.62</td>
</tr>
<tr>
<td>Pump 17 3404-02</td>
<td>1</td>
<td>Agr./Dom.</td>
<td>15.0</td>
<td>8.63</td>
<td>Agr./Dom.</td>
<td>15.0</td>
<td>2,592.37</td>
<td>0.19</td>
</tr>
<tr>
<td>Pump 24 3162-02</td>
<td>1</td>
<td>Agr.</td>
<td>4.50</td>
<td>2.58</td>
<td>Agr.</td>
<td>4.50</td>
<td>941.70</td>
<td>2.58</td>
</tr>
<tr>
<td>Pump 25 3203-02</td>
<td>1</td>
<td>Agr.</td>
<td>4.50</td>
<td>2.76</td>
<td>Agr.</td>
<td>4.50</td>
<td>1,007.40</td>
<td>2.76</td>
</tr>
<tr>
<td>Pump 26 3203-02</td>
<td>1</td>
<td>Agr.</td>
<td>4.50</td>
<td>2.76</td>
<td>Agr.</td>
<td>4.50</td>
<td>1,007.40</td>
<td>2.76</td>
</tr>
<tr>
<td><strong>Subtotal (Waialua Sugar Co.)</strong></td>
<td>10</td>
<td>89.75</td>
<td>48.38</td>
<td>89.75</td>
<td>17,658.70</td>
<td>48.38</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Water Supply</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waialua Wells 3405-01, 02</td>
<td>2</td>
<td>Mun.</td>
<td>4.32</td>
<td>1.73</td>
<td>Mun.</td>
<td>4.32</td>
<td>631.45</td>
<td>1.73</td>
</tr>
<tr>
<td><strong>Private Users</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kawaguchi, Howard 3505-07</td>
<td>1</td>
<td>Agr.</td>
<td>0.180</td>
<td>0.058</td>
<td>Agr.</td>
<td>0.180</td>
<td>21.17</td>
<td>0.058</td>
</tr>
<tr>
<td>Kawamura, Kongo 3406-03</td>
<td>1</td>
<td>Agr. Nat. Flow</td>
<td>0.0 data</td>
<td>0.0 data</td>
<td>Agr. No data</td>
<td>0.0 data</td>
<td>36.5</td>
<td>0.1</td>
</tr>
<tr>
<td>Kunihiko, Shizu 3406-06, 3407-02</td>
<td>2</td>
<td>Agr. Nat. Flow</td>
<td>No data</td>
<td>No data</td>
<td>Agr. No data</td>
<td>No data</td>
<td>72.0</td>
<td>0.2</td>
</tr>
<tr>
<td>Oceanic Properties 3405-03, 04</td>
<td>2</td>
<td>Mun.</td>
<td>0.016</td>
<td>0.016</td>
<td>Mun.</td>
<td>0.016</td>
<td>36.5</td>
<td>0.1</td>
</tr>
<tr>
<td>Polynesian Shares 3406-05</td>
<td>1</td>
<td>Oth.</td>
<td>0.944</td>
<td>0.144</td>
<td>Oth.</td>
<td>0.944</td>
<td>52.56</td>
<td>0.144</td>
</tr>
<tr>
<td><strong>Subtotal (Private Users)</strong></td>
<td>7</td>
<td>2.34</td>
<td>0.292</td>
<td>2.34</td>
<td></td>
<td>548.23</td>
<td>1.502</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL - Waialua Subarea</strong></td>
<td>79</td>
<td>96.41</td>
<td>50.312</td>
<td>96.41</td>
<td></td>
<td>18,923.39</td>
<td>51.612</td>
<td></td>
</tr>
</tbody>
</table>

*For Agr./Dom. uses, specific quantities for each use are to be determined when additional information becomes available.*
### Waialua GWCA

#### DECLARED EXISTING USE

<table>
<thead>
<tr>
<th>User/Source</th>
<th>State Well No.</th>
<th>Total Wells</th>
<th>Usu.</th>
<th>Source Capacity (mgd)</th>
<th>Source Withdrawal (mgd)</th>
<th>5-yr. Ave. Withdrawal (mgd)</th>
<th>Use</th>
<th>Maximum Daily Use (mgd)</th>
<th>Total Annual Use (mgd)</th>
<th>Average Daily Use (mgd)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mokuleia Subarea</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Waialua Sugar Co.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pump 5</td>
<td>3411-04, 06 to 11, 13</td>
<td>8</td>
<td>Agr.</td>
<td>8.5</td>
<td></td>
<td>2.55</td>
<td>Agr.</td>
<td>7.0</td>
<td>930.75</td>
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<td>Pump 11</td>
<td>3409-13</td>
<td>1</td>
<td>Agr./ Dom.</td>
<td>1.5</td>
<td></td>
<td>0.53</td>
<td>Agr./ Dom.</td>
<td>1.5</td>
<td>153.30</td>
<td>0.42</td>
</tr>
<tr>
<td>Subtotal (Waialua Sugar Co.)</td>
<td></td>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10.0</td>
<td>1,124.20</td>
<td>3.08</td>
</tr>
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<td><strong>Private Users</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Army - Millingham</td>
<td>3412-02</td>
<td>1</td>
<td>Dom.</td>
<td>0.720</td>
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<td>Dom.</td>
<td>0.720</td>
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<tr>
<td>Air Force - Kauai Mt.</td>
<td>3314-03</td>
<td>1</td>
<td>Ulth.</td>
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<td>0.018</td>
<td>Ulth.</td>
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<td>0.011</td>
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<tr>
<td>Mokuleia Assoc.</td>
<td>3409-10</td>
<td>1</td>
<td>Dom.</td>
<td>No data</td>
<td></td>
<td></td>
<td>Dom.</td>
<td>-0-</td>
<td>-0-</td>
<td>-0-</td>
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<tr>
<td>Mokuleia Homestead</td>
<td>3410-01</td>
<td>1</td>
<td>Agr./ Dom.</td>
<td>Nat. flow</td>
<td>0.5</td>
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<td>Agr./ Dom.</td>
<td>0.5</td>
<td>102.3°</td>
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<tr>
<td>- 3410-03</td>
<td>1</td>
<td>Agr./ Dom.</td>
<td>1.512</td>
<td>1.5</td>
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<td>Agr./ Dom.</td>
<td>1.5</td>
<td>547.5°</td>
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<td>- 3410-05</td>
<td>1</td>
<td>Agr. Nat. flow</td>
<td>8.1</td>
<td>To be sealed</td>
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<td>To be sealed</td>
<td>-0-</td>
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<td>- 3310-01</td>
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<td>Agr./ Dom.</td>
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<td>No data</td>
<td></td>
<td>Agr./ Dom.</td>
<td>1.5</td>
<td>383.25</td>
<td>1.05</td>
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<td>- 3410-02</td>
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<td>1.5</td>
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<td></td>
<td>Agr./ Dom.</td>
<td>1.5</td>
<td>383.25</td>
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<td>Subtotal (Private Users)</td>
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<td>8</td>
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<td>5.318</td>
<td>2.118</td>
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<td><strong>TOTAL - Mokuleia Subarea</strong></td>
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<td>17</td>
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<td>15.318</td>
<td>5.198</td>
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<tr>
<td><strong>Waialua Sugar Co.</strong></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Pump 4</td>
<td>3409-05 to 06, 08 to 08, 11 to 13</td>
<td>9</td>
<td>Agr.</td>
<td>14.0</td>
<td></td>
<td>5.53</td>
<td>Agr.</td>
<td>14.0</td>
<td>2,018.45</td>
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<td><strong>Private User</strong></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>- Makalaw Gold Farm</td>
<td>3704-01</td>
<td>1</td>
<td>Ind.</td>
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<td>0.420</td>
<td>Ind.</td>
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<td>14.648</td>
<td>5.96</td>
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</tbody>
</table>

*For Agr./Dom. uses, specific quantities for each use are to be prorated when additional information becomes available.*

C10
**State of Hawaii**

**COMMISSION ON WATER RESOURCE MANAGEMENT**

Department of Land and Natural Resources

**MONTHLY GROUND WATER USE REPORT**

**FEBRUARY, 2012**

**Instructions:** Please type or print clearly. Complete this form to report total monthly ground water use, and, if required, other information from each of your well sources. Mail to: Commission on Water Resource Management, P.O. Box 621, Honolulu, HI 96809. For assistance, please call...

<table>
<thead>
<tr>
<th>State Well No.</th>
<th>Well Name</th>
<th>Period Begin Date (mm/dd/yy)</th>
<th>Period End Date (mm/dd/yy)</th>
<th>Quantity Pumped (gallons)</th>
<th>Method of Measurement</th>
<th>Chloride (mg/l)</th>
<th>Temp (°F)</th>
<th>Non-Pumping Water Level (ft above msl)</th>
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</thead>
<tbody>
<tr>
<td>B545-12</td>
<td>OPAAKA PUMP 3</td>
<td>1-31-12</td>
<td>2-29-12</td>
<td>15,751,200</td>
<td>Flow meter</td>
<td>40</td>
<td>72</td>
<td>10.18</td>
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<tr>
<td>B545-03</td>
<td>WAINIHA PUMP A</td>
<td>1-31-12</td>
<td>2-29-12</td>
<td>8,366,800</td>
<td>Flow meter</td>
<td>80</td>
<td>80</td>
<td>10.2</td>
</tr>
</tbody>
</table>

* Flow meter, electrical consumption, weir or flume, not metered (estimated).
** Measurement should be taken while pump is NOT running just prior to a pumping cycle. If measurement is taken while pump is running, please indicate so.

Other comments or additional information (e.g., date and method of chloride measurement, how pumpage amounts are estimated, etc.):

Submitted by (print): **SID KENT** (3-8-12)  
Title:  
Signature:  
Date:  

GWUR-MON FORM (06/10/2004)
WATER USE PERMIT NO. 137

This report has been prepared in accordance with 13-171-22(b) of the Hawaii Revised Statutes requiring a 20-year review of issued water use permits to determine permit compliance. Following is a summary of permit information, site characteristics, methodology, findings, and recommendations for this State permit file.

Permit Information

<table>
<thead>
<tr>
<th>Water User:</th>
<th>Kamehameha Schools 567 S. King St., Suite 200 Honolulu, HI 96813</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landowner of Source:</td>
<td>Kamehameha Schools 567 S. King St., Suite 200 Honolulu, HI 96813</td>
</tr>
<tr>
<td>Permitted Withdrawal Rate:</td>
<td>1.552 mgd (Based upon a 12-month moving average)</td>
</tr>
<tr>
<td>Water Management Area:</td>
<td>Waialua</td>
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<tr>
<td>Island:</td>
<td>Oahu</td>
</tr>
<tr>
<td>Aquifer Sector/System:</td>
<td>North/Waialua</td>
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<tr>
<td>System Sustainable Yield:</td>
<td>40 mgd</td>
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<tr>
<td>Water Type:</td>
<td>Fresh</td>
</tr>
<tr>
<td>Original CWRM Date:</td>
<td>June 2\textsuperscript{nd}, 1993</td>
</tr>
<tr>
<td>Standard Conditions:</td>
<td>N/A</td>
</tr>
<tr>
<td>Special Conditions:</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Water Source

| State Well Number(s): | 3505-01 thru 3505-20 |
| Well Name:            | Pump #3 |
| Water Source TMK Number(s): | 1\textsuperscript{st} Division, 6-2-010:001 |
| State Land Use Classification(s): | Agriculture/Conservation |
| County Zoning Classification(s): | AG-1/P-1 |
| Geographical Coordinates: | Latitude 21° 34' 57.6" North<br>Longitude 158° 05' 36.1" West |

End Use

| End Use TMK Number(s): | 1\textsuperscript{st} Division, 6-2-010:001, 6-2-009:001, 6-1-005:019 |
| State Land Use Classification(s): | Agriculture/Conservation |
| County Zoning Classification(s): | AG-1/P-1 |
| Beneficial Use Explanation: | Use for diversified agriculture |
Background Information

State Well Nos. 3505-01 thru 3505-20 were used by Waialua Sugar until operations were ceased in the mid-1990's. The current landowner, Kamehameha Schools (formerly Bishop Estate), is now the entity that maintains and is responsible for the existing water system. However, no permit transfer has been made to reflect this change. As such, the transfer process should be initiated to list Kamehameha Schools as both the current permittee and landowner for Water Use Permit 137.

Water Use Permit 137 was approved during the June 2nd, 1993 Commission on Water Resource Management meeting. There are no water use or salinity records on file for the Pump 3 battery. During the research phase of this project, the file for State Well Nos. 3505-01 thru 3505-20 could not be located. As such, certain permit information, including the standard and special conditions associated with WUP 137, are not available. A complete list of all standard and special conditions is given in the permit file.

Field Investigation Information

Contact: Kaeo Duarte
Site Address: Pump #3
Haleiwa, HI 96712

Brown and Caldwell conducted a field investigation on September 5th, 2008 from 9:00 a.m. until 11:00 a.m. with Ms. Kapu Smith, who is an associate of Mr. Kaeo Duarte. During this time, type of water usage was verified, GPS coordinates of well head(s) were recorded, flow meter installation and functionality were documented, and property TMK information was verified. The wellhead, its related appurtenances, and water usage area were visually inspected to assess compliance with permit conditions. Visual inspection of water loss/waste was limited to outdoor areas within the usage boundary. The physical location of this site is Mauka of Joseph Leong Highway, adjacent to the old cane haul road that runs through Haleiwa town. Reference the TMK and GIS maps in the permit file for a visual representation of the site.

Summary of Findings for Water Use Permit No. 137

The Pump #3 battery, consisting of State Well Nos. 3505-01 thru 3505-20, is located on TMK parcel 6-2-010:001 at 21° 34' 57.6" N, 158° 05' 36.1" W, with a real time accuracy of ±25 feet. The pump house a large, 50-ft deep sunken chamber enclosed within a warehouse sized building. Four tunnels penetrate the chamber walls horizontally outwards for approximately 30-feet. At
the end of each tunnel, several lines branch off to the different well heads. Water flows in an artesian manner from the shafts into the distribution tunnels. Pumps located within the chamber draw water from the channels and distribute it to the end users. System controls and a functional flowmeter are located in the sunken chamber, adjacent to the well pump.

The system in place is a retrofitted version of a much older pump and piping configuration. A vertically mounted pump motor draws water from four channels and conveys the water through a large reducer fitting into the much larger distribution line that is still in place from the older system. Water is conveyed through this 2-ft diameter pipe from the pump house at the bottom of a gulch, to the end use fields on higher ground. Within the fields, a combination of underground piping and above ground irrigation ditches delivers the water to the appropriate storage reservoirs or end use fields. A second flowmeter is located on the central line in the field, prior to the water being distributed.

Water from the well is ultimately used for diversified agriculture (corn, tuberose, papaya) on TMK parcels 6-2-010:001, 6-2-009:001, and 6-1-005:019, which are all leased by Kamehameha Schools to various organizations.

Since no conditions could be located during the research phase of this project, it is difficult to ascertain the extent of permit compliance. However, the following are a list of standard condition(s) that the permittee could be in non-compliance with:

(10) An approved flowmeter must be installed to measure monthly withdrawals and a month record of withdrawals, salinity, temperature, and pumping times must be kept and reported to the Commission on Water Resource Management on forms provided by the Commission on a monthly basis.

(12) A permit may be transferred, in whole or in part, from the permittee to another, if:

a. The conditions of use of the permit, including, but not limited to, place, quantity, and purpose of use, remain the same; and

b. The Commission is informed of the transfer within ninety days.

Failure to inform the department of the transfer invalidates the transfer and constitutes a ground for revocation of the permit. A transfer, which involves a change in any condition of the permit, including a change in use covered in HRS § 174C-57, is also invalid and constitutes a ground for revocation.

Before any action is taken, conditions for this permit should be located. It is worth noting, however, that regardless of whether or not the permittee is in compliance with their conditions, non-reporting of water use is a direct violation of the reporting requirements set forth in the State Water Code.
Recommendations

- Address the following discrepancies between the Commission’s electronic database and actual field investigation findings:
  - Permittee and landowner names and addresses
  - Change permittee contact to Kaeo Duarte at kaduarte@ksbe.edu
  - TMK parcel information
  - Beneficial use description
  - State land use and county zoning classifications.
- Address potential violation of Standard Condition (10) regarding non-reporting of water use and salinity levels.
- Address potential violation of Standard Condition (12) regarding use of water from the Pump #3 well battery without having transferred this water use permit from Waialua Sugar to Kamehameha Schools.

Lindi Ra交通运输 - ilindse@ksbe.edu
20-Year Water Use Permit Review
Water Use Permit No. 137

APPENDIX

Field Investigation Photographs
Figure 1 – Pump house & well chamber

Figure 2 – Typical tunnel fed by artesian flow from well shafts
Figure 3 – Well pumps/motors

Figure 4 – System controls
Figure 5 – System flowmeter in the pump house

Figure 6 – Main distribution line daylight location
Figure 7 – Typical storage reservoir and end use location

Figure 8 – Typical end use location
Figure 9 – Typical irrigation ditch system
Water Use Permit Survey
(Please complete one survey form for each WUP)

WUP Number: 137 Well Number(s): 3505-01 thru 20

Contact Information (of the person who will be present at site visit):
Name: Kaeo Duarte
Phone (for phone interview): 534-3866 Fax: 808-523-6374
Email: kaeoduarte@hsoe.edu
Best time to reach for phone interview: 10am

Property Information (of the water use/well location):
Address: ____________________________________________________________________
City: ______________ Zip: ______________
Well Location TMK (list all if multiple wells present): 6-2-01D:001
Water Use TMK (list all if used on multiple lots): 6-2-01D:001; 6-2-009:001; 6-1-005:019

Water Use/Well Information:
Is the water source currently in use? Yes ☒ No ☐
If no, please explain: ___________________________________

What are you currently using the water for? (example: "Use for 45 acres of diversified agriculture and 3 residences"): Various diversified ag: nursery plants, fruits, vegetables, sweet corn, cut flowers

Is a flow meter installed and working properly? Yes ☐ No ☒
If no, please explain: We are in a state of transition from former lessee. Dale. We are actively working to repair the system.

Do you submit monthly water use reports to the State? Yes ☐ No ☒
If no, please explain: See above

Field Investigations:
A representative from Brown and Caldwell will be visiting wells in your area over the next several months between the times of 9:00 am and 5:00 pm. Each site investigation will take approximately 1-2 hours. Please indicate up to three potential days of the week and availability times for an on-site inspection of the well location and verification of water use compliance. The permit holder must provide Brown and Caldwell with at least five (5) working days notice of the need to reschedule.

Option #1 Date (M-F): ___________ Time: 9:00 am ☐ 12:00 pm ☐ 3:00 pm ☐
Option #2 Date (M-F): ___________ Time: 9:00 am ☐ 12:00 pm ☐ 3:00 pm ☐
Option #3 Date (M-F): ___________ Time: 9:00 am ☐ 12:00 pm ☐ 3:00 pm ☐

Once this survey is returned, a Brown and Caldwell representative will be contacting you to conduct a phone interview and finalize the exact date and time of your field investigation. Please fax/mail completed surveys by December 12th, 2007 and direct any questions related to this survey to Mr. Milo Smith of Brown and Caldwell at:
1099 Alakea Street, Suite #2400
Honolulu, HI 96813
Tel: (808) ☐ Fax: (808) 533-0226
mcsmith@brwncald.com

For Official Use Only
Received: 6/22/08 Information Updated: 6/22/08 Phone Interview Complete: 6/26/08
Notes/Comments:
## Phone Interview

<table>
<thead>
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<th>Field</th>
<th>Details</th>
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<tbody>
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<td>137</td>
</tr>
<tr>
<td>Well Number(s)</td>
<td>3505-01 thru -20</td>
</tr>
<tr>
<td>Contact Name</td>
<td>Keo Duarte</td>
</tr>
<tr>
<td>Phone Number</td>
<td>534-3306</td>
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<tr>
<td>Attempt #1: Date/Time</td>
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<tr>
<td>Attempt #2: Date/Time</td>
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<tr>
<td>Well Location TMK(s)</td>
<td>6-2-010:001</td>
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<tr>
<td>Water Use TMK(s)</td>
<td>6-2-020:001, 6-1-020:001, 6-1-005:01A</td>
</tr>
<tr>
<td>Water Source Address</td>
<td>Pump #3</td>
</tr>
<tr>
<td>City</td>
<td>Haleiwa</td>
</tr>
<tr>
<td>Zip Code</td>
<td>96712</td>
</tr>
<tr>
<td>Currently using water source?</td>
<td>Yes ☑</td>
</tr>
<tr>
<td>How often is the water source being used?</td>
<td>Daily ☑ Weekly ☐ Monthly ☐</td>
</tr>
<tr>
<td>How long have you been using this water source?</td>
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</tr>
<tr>
<td>Has there been any rezoning of the water source/water use properties?</td>
<td>Yes ☐ No ☑</td>
</tr>
<tr>
<td>Have you reported the rezoning to the State?</td>
<td>Yes ☐ No ☐ N/A ☑</td>
</tr>
<tr>
<td>If no, explain:</td>
<td></td>
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</table>

### Notes/Comments:

- Use for diversified ag
- Daily ☑ Weekly ☐ Monthly ☐
- N/A
- Yes ☐ No ☑
- Yes ☐ No ☐ N/A ☑

**Scheduled field investigation day/time:** 4/15/06 @ 9:00 AM

**Notes (Special directions, site conditions, potential hazards, general notes, etc.):**

- Meet w/Kapu Smith at parking lot next to core haul road.

**Kapu Smith**

372-2476

### Comments To Make:

- Although we prefer that you do not change your scheduled field investigation time, if you require a reschedule, you must provide Brown and Caldwell with at least five (5) working days notice of the need to reschedule.
- A representative from Brown & Caldwell will be making a reminder phone call to you sometime during the week prior to your scheduled field investigation.
- It is very important that you provide access to the site at the day and time agreed upon. Due to a very tight schedule, if you fail to provide access at the agreed upon time and/or do not reschedule with at least a five (5) working day notice, a makeup date will not be allowed.
- If for some reason you don't know where your well head is located, it would be a good idea to locate it prior to your field investigation to help make the visit go quickly and smoothly.

**Interviewed By:** M.S.  
**Date:** 4/26/06  
**Time:** 9:30 AM
# Field Investigation Checklist

**WUP Number:** 137  
**Well Number(s):** 3505-01 thru 20

## Water Source

- **Well Location TMK(s):** 6-2-101:001
- **Well Head GPS Coordinates:** Latitude: 21° 34' 57.6" N  
  Longitude: 156° 05' 36.1" W  
  (± 25 ft)
- **Well Type:** Battery, Drilled
- **Currently using water source?** Yes ☒  
  No ☐
- **Notes/Comments:**

  Is there a flow meter installed? Yes ☒  
  No ☐
  Is the flow meter operational? Yes ☒  
  No ☐
  Notes/Comments:

  2 EMS - one at source, one in line at the field.

## Water Use

- **Water Use TMK(s):** 6-2-101:001, 6-2-102:001, 6-1-105:01A
- **What is the water being used for?** Diversified agriculture (corn, tuberose, papaya)
- **Is the water being used within the permitted boundaries?** Yes ☐  
  No ☒
  If no, explain:
  N/A - No boundaries given in permit file.
- **Is there any observed wasting of water or water loss?** Yes ☐  
  No ☒
  If no, explain:
- **Are the permit conditions being complied with?** Yes ☐  
  No ☒
  If no, explain:
  No water use/salinity (If there are conditions of this permit)

## Other

- **Photographs of:**
  - Water Source ☒
  - Water Meter ☒
  - Usage Area ☐
  - Pump/Motor ☒

**General Notes/Comments:**

- Water drawn pumped up the hill and into distribution system for the leasee's diversified agriculture purposes.

| Investigated By: | M S | Date: 9/15/05 | Time: 9:09 a.m. |
Standard Conditions List

1. The water described in this water use permit may only be taken from the location described and used for the reasonable beneficial use described at the location described above. Reasonable beneficial uses means "the use of water in such a quantity as is necessary for economic and efficient utilization, which is both reasonable and consistent with State and County land use plans and the public interest." (HRS § 174C-3)

2. The right to use ground water is a shared use right.

3. The water use must at all times meet the requirements set forth in HRS § 174C-49(a), which means that it:
   a. Can be accommodated with the available water source;
   b. Is a reasonable-beneficial use as defined in HRS § 174C-3;
   c. Will not interfere with any existing legal use of water;
   d. Is consistent with the public interest;
   e. Is consistent with State and County general plans and land use designations;
   f. Is consistent with County land use plans and policies; and
   g. Will not interfere with the rights of the Department of Hawaiian Home Lands as provided in Section 221 of the Hawaiian Homes Commission Act and HRS § 174C-101(a).

4. The ground-water use here must not interfere with surface or other ground-water rights or reservations.

5. The ground-water use here must not interfere with interim or permanent instream flow standards. If it does, then:
   a. A separate water use permit for surface water must be obtained in the case an area is also designated as a surface water management area;
   b. The interim or permanent instream flow standard, as applicable, must be amended.

6. The water use authorized here is subject to the requirements of the Hawaiian Homes Commission Act, as amended, if applicable.

7. The water use permit application and submittal, as amended, approved by the Commission at its <Insert Date> meeting are incorporated into this permit by reference.

8. Any modification of the permit terms, conditions, or uses may only be made with the express written consent of the Commission.

Variations of Standard Condition (8) are as follows:
   i. Modification of any permit condition shall be approved by the Commission. Modification of any permit condition without notification may result in the revocation of the water use permit.
9. This permit may be modified by the Commission and the amount of water initially granted to the permittee may be reduced if the Commission determines it is necessary to:
   a. Protect the water sources (quantity or quality);
   b. Meet other legal obligations including other correlative rights;
   c. Insure adequate conservation measures;
   d. Require efficiency of water uses;
   e. Reserve water for future uses, provided that all legal existing uses of water as of June, 1987 shall be protected;
   f. Meet legal obligations to the Department of Hawaiian Home Lands, if applicable; or
   g. Carry out such other necessary and proper exercise of the State’s and the Commission’s police powers under law as may be required.

Prior to any reduction, the Commission shall give notice of its proposed action to the permittee and provide the permittee an opportunity to be heard.

10. An approved flowmeter(s) **must be** installed to measure monthly withdrawals and a monthly record of withdrawals, salinity, temperature, and pumping times **must be** kept and reported to the Commission on Water Resource Management on forms provided by the Commission on a **monthly** basis (attached).

**Variations of Standard Condition (10) are as follows:**

i. The applicant shall keep monthly pumpage estimates to be submitted annually to the Commission.

ii. An approved flowmeter(s) **need not** be installed to measure monthly withdrawals and a monthly record of withdrawals, salinity, temperature, and pumping times **must be** kept and reported to the Commission on Water Resource Management on forms provided by the Commission on a **yearly** basis (attached).

iii. An approved flowmeter(s) **must be** installed to measure withdrawals and a monthly record of withdrawals, water-levels, salinity, and temperature **must be** kept and reported to the Commission on a **monthly** basis in accordance with the Commission’s September 16, 1992 action on reporting requirements.

iv. Approved flowmeters **must be** installed to measure monthly withdrawals and a monthly record of withdrawals **must be** kept and reported to the Commission on Water Resource Management on a **monthly** basis.

v. An approved flowmeter(s) **must be** installed to measure monthly withdrawals and a monthly record of withdrawals, salinity, temperature, and pumping times **must be** kept and reported to the Commission on Water Resource Management on forms provided by the Commission on a **quarterly/yearly** basis (attached).

vi. An approved flowmeter shall be installed to measure water withdrawals

vii. An approved flowmeter(s) **must be** installed to measure withdrawals; and a record of the withdrawals **must be** kept and reported to the Department of
Land and Natural Resources, Division of Water and Land Development, P.O. Box 373, Honolulu, HI 96809, on a \textbf{monthly} basis.

viii. Although not stated as a condition of the permit § 13-168-7 HAR requires you to keep a record of your \textbf{monthly} total pumpage, water level, salinity, and water temperature. This information \textbf{must be} submitted to the Commission on a regular monthly basis using the enclosed water use report form.

ix. An approved flowmeter shall be installed and the withdrawal from Well 1851-73 shall be recorded and reported to DLNR on a \textbf{monthly} basis by the owner and/or operator of the well.

x. The withdrawals from these wells shall be recorded and reported to the DLNR on a \textbf{monthly} basis by the BWS.

xi. The applicant shall provide and maintain an approved meter or other appropriate device or means for measuring and reporting water usage on a \textbf{monthly} basis.

xii. The applicant shall provide and maintain an approved meter or other appropriate device or means for measuring and reporting total water usage. Water usage shall be measured on a \textbf{monthly} basis and reported to the Commission.

xiii. The applicant shall provide and maintain an approved meter or other appropriate device or means for measuring and reporting total water usage. Water usage shall be measured on a \textbf{monthly} basis and reported to the Commission along with water level and salinity measurements.

11. This permit shall be subject to the Commission's periodic review of the \textless\textit{Aquifer}\textgreater\ Aquifer System's sustainable yield. The amount of water authorized by this permit may be reduced by the Commission if the sustainable yield of the \textless\textit{Aquifer}\textgreater\ Aquifer System, or relevant modified aquifer(s), is reduced.

12. A permit may be transferred, in whole or in part, from the permittee to another, if:
   \begin{itemize}
   \item[a.] The conditions of use of the permit, including, but not limited to, place, quantity, and purpose of use, remain the same; and
   \item[b.] The Commission is informed of the transfer within ninety days.
   \end{itemize}

   Failure to inform the department of the transfer invalidates the transfer and constitutes a ground for revocation of the permit. A transfer, which involves a change in any condition of the permit, including a change in use covered in HRS § 174C-57, is also invalid and constitutes a ground for revocation.

13. The uses(s) authorized by law and by this permit do not constitute ownership rights.

14. The permittee shall request modification of the permit as necessary to comply with all applicable laws, rules, and ordinances that will affect the permittee's water use.

15. The permittee understands that under HRS § 174C-58(4), that partial or total nonuse, for reasons other than conservations, of the water allowed by this permit for a period of four (4) continuous years or more may result in a permanent revocation as to the amount of water not in use. The Commission and the permittee may enter
into a written agreement that, for reasons satisfactory to the Commission, any period of nonuse may not apply towards the four-year period. Any period of nonuse which is caused by a declaration of water shortage pursuant to section HRS § 174C-62 shall not apply towards the four-year period or forfeiture.

16. The permittee shall prepare and submit a water shortage plan within 30 days of the issuance of this permit as required by HAR § 13-171-42(c). The permittee's water shortage plan shall identify what the permittee is willing to do should the Commission declare a water shortage in the <Aquifer>Ground-Water Management Area.

17. The water use permit shall be subject to the Commission's establishment of instream standards and policies relating to the Stream Protection and Management (SPAM) program, as well as legislative mandates to protect stream resources.

18. The permittee understands that any willful violation of any of the above conditions or any provisions of HRS § 174C or HAR § 13-171 may result in the suspension or revocation of this permit.

19. Special conditions in the attached cover transmittal letter or attached exhibits are incorporated herein by reference.

20. If the ground-water source does not presently exist, the new well shall be completed, i.e. able to withdraw water for the proposed use on a regular basis, within twenty-four (24) months from the date the water use permit is approved.

Variations of Standard Condition (20) are as follows:

i. The permit may be revoked if work is not started within six months of the date of issuance or if work is suspended or abandoned for six months. The work proposed in the permit application shall be completed within two years from the date of permit issuance.

21. This permit may not be transferred or the use rights granted by this permit sold or in any other way alienated. Pursuant to HRS § 174C-59 and the requirements of Chapter 174C, the Commission on Water Resource Management has the authority to allow the transfer of the permit and the use rights granted by this permit in a manner consistent with HRS § 174C-59. Any such transfer shall only occur with the Commission’s prior express written approval. Any sale, assignment, lease, alienation, or other transfer of any interest in this permit shall be void.

22. The water use permit granted shall be an interim water use permit, pursuant to HRS § 174C-50. The final determination of the water use quantity shall be made within five (5) years of the filing of the application to continue the existing use.

23. The water use permit shall be issued only after agricultural review.

24. That scheduled adjustments to Oahu Sugar Co. permitted use shall be initiated upon discontinuance of agricultural uses.
25. The issuance of this permit was approved by the Commission on Water Resource Management at its meeting on <Insert Date>.

26. The permit shall be subject to the review by the Attorney General.

27. The permit holder may be required to relinquish this permit at any time or specified time after issuance to the Board of Land and Natural Resources in accordance with Chapter 166 of Title 13.

28. The applicant shall obtain the necessary land acquisition documents from the Hawaii Housing Authority.
Special Conditions List

1. Should an alternate permanent source of water be found for this use, then the Commission reserves the right to revoke this permit, after a hearing.

2. In the event that the tax map key at the location of the water use is changed, the permittee shall notify the Commission in writing of the tax map key change within thirty (30) days after the permittee receives notice of the tax map key change.

3. The applicant shall contact the Environmental Management Division, State Department of Health, at [ ] concerning “GUIDELINES APPLICABLE TO GOLF COURSES IN HAWAII” date <Insert Date & Version #>.

4. Standard Condition 10 is emphasized, to report consumption on a regular basis.

5. The applicant may continue this existing use of ground water within the limits approved by the Commission, and the actual issuance of the interim permit shall not be a reason to interrupt this existing use.

6. This interim water use permit shall cease to become interim and shall be subject to HRS § 174C-55 upon administrative review of the quantity within five (5) years, provided that all conditions of the use (including the review of the quantity which shall not be greater than the amount initially granted) remain the same. Enforcement of the allocation limit shall be stayed pending staff's review and issuance of a permanent water use permit.

7. As-built drawings of the well and pump, and a complete pumping test record shall be submitted within sixty (60) days.

8. In the event the pump tests show that aquifer boundary conditions do not support the requested withdrawals, the Commission reserves the right to amend this permit, after a hearing, to a level that is supported by the pump tests.

9. The existing use may be continued within the levels approved by the Commission, and the actual issuance of the permit document shall not be a reason to interrupt the approved level of use.

10. The filing of an application by Kukui, Inc. for a new or modified water use permit for the Kualapuu Aquifer in excess of 2.0 mgd (total system withdrawal) shall be just cause for re-consideration of this interim permit by the Commission.

11. Upon completion of a new transmission line for the transport of water use by Well #17, the permit shall be modified to reduce the allocation amount by the additional 79,220 gallons per day allocated for use of the Molokai Irrigation System.

12. Within six (6) months from the date of approval of a water use permit for the well, the applicant shall conduct a feasibility study and submit a report describing
alternative sources of nonpotable water for irrigation uses at the resort area. It is suggested that the developer consider use of dual lines in the subdivisions so that effluent may be used in the existing reuse system. Another consideration is the development of brackish water wells in the Kaluakoi Aquifer system for mixing with the effluent generated at the resort.

13. Within six (6) months from the date of approval of a water use permit for the well, the application shall evaluate the filter back discharges into Kakaako Gulch to determine if excessive preventable waste is occurring and identify possible measures to eliminate or reduce such waste. The evaluation shall be conducted in cooperation with the Commission staff and staff of the Department of Health's Safe Drinking Water Branch, which regulates the drinking water system.

14. Within six (6) months from the date of approval of a water use permit for the well, the applicant shall 1) implement a leakage control and detection system and compete repairs to prevent such leakage and 2) implement use of xeriscaping and low-flow fixtures.

15. Action on the future use portion of the water use permit application for Well #17 (Well No. 0901-01) is deferred pending the establishment of existing uses in the aquifer. Kukui Inc.'s application for uses in excess of those uses existing on July 15, 1992 will be considered "new" uses and will be taken up by the Commission as soon as other existing use applications have been decided. In the interim,
   a. The Commission shall recognize that there is disagreement between the applicant's staff calculations of reasonable-beneficial existing use
   b. The Applicant will have the burden of proof to show within six (6) months reasonable-beneficial existing use calculations that support the applicant's request as opposed to staff's calculations.
   c. The Commission's enforcement of the approved existing use allocation will be suspended for six (6) months.

16. The permittee shall submit a notice of intent and written request to continue the use at least ninety (90) days prior to the expiration of the interim five-year permit.

17. The Commission shall delegate to Maui Department of Water Supply the authority to allocate the use of water for municipal purposes, as provided in §174C-48(b).

18. Maui Department of Water Supply shall be exempt from the requirements for permit modifications, as provided in §174C-57(c).

19. The permittee must meter water use and monitor chloride concentrations on a monthly basis and submit monthly reports of water use and chloride concentrations to the Commission.

20. Standard Condition 16 is waived for saltwater wells.

21. The permit will be revoked if (1) stream monitoring shows that pumping the well reduces stream flow, or (2) the electromagnetic resistivity survey indicates that the
well was drilled into a dike compartment, unless the applicant submits a petition for an amendment to the interim instream flow standard with the well completion report. However, no use of the water may be made without a Pump Installation Permit, which cannot be issued during consideration of the amendment of the interim instream flow standard.

22. The applicant shall present the results of the electromagnetic resistivity survey, pump tests, and stream monitoring to a community meeting as well as to the Commission.

23. A final determination of water use quantity shall be made within five (5) years of the filing date of the application (<Insert Date>) to continue existing use.

24. The applicant shall implement, by December 31, 1995, a biological and hydraulic monitoring program for a minimum 2-year period that: 1) documents the existing operating procedure, 2) seeks to identify the impacts of all operating alternatives on Waikolu Stream, and 3) seeks to identify the effectiveness of weir modifications (Dam No. 1). This program shall incorporate the three new wells, Wells #4-6 (Well Nos. 0855-06, -05, &-04, respectively), which may be pumped within the approved limits, for monitoring and testing purposes only. Further, semi-annual reports summarizing data and preliminary findings shall be submitted to the Commission. It is suggested that the Department of Agriculture work with the State Division of Aquatic Resources and other affected agencies to prepare the monitoring program in light of the difficult technical questions raised by this application. A particular concern is the coordination of this monitoring program with the ongoing National Park Service study by Anne Brasher. A draft of this plan shall be submitted to the Commission staff within ninety (90) days for technical review and comment. Results of the monitoring program shall be used to make recommendations to the Commission on any additional use of the wells, and shall be made readily available to all interested parties.

25. That the Commission approves the well construction permit for the Kamiloloa-Waiola Well (Well No. 0759-01), subject to the standard well construction conditions and the special conditions for the pumping well for the aquifer tests.

26. That the Commission authorizes the Chairperson to approve and issue a pump installation permit upon acceptance of adequate pump test result, subject to the standard pump installation conditions.

27. Should the well be used for back-up domestic supply, applicant is advised to contact DOH or otherwise ensure safe drinking water quality is maintained.

28. The applicant shall follow the agreed monitoring plan.

29. If pesticides used by the applicant are found in ground or surface water and can be traced to the applicant's use, the CWRM may revoke the permit immediately upon such finding.
30. Issuance of the interim permit shall be withheld until the reservation of water for DHHL is set by rule. Applicant may continue this existing use within the approved limits.

31. The applicant shall submit well modification and pump installation permit applications for administrative approval by chairperson prior to beginning any work required to complete well.

32. Should any stream flow impacts result from use, petition to amend interim instream flow standards shall be submitted.

33. Should any dewatering result from use, pumping shall cease immediately.

34. Shall submit accurate schematic diagram of distribution system for the battery of 5 wells.

35. Shall be subject to a 6-month independent audit & monitoring.

36. Final pump capacity shall be determined from pump test results & approved administratively by signature of chair.

37. The permittee shall seek and submit to the Commission within ninety (90) days written confirmation from the Department of Land Utilization of the non-conforming use.

38. Pumping shall cease immediately if the chloride reports show that the brackish water developed in the well exceeds 1,000 mg/l of chloride, unless a variance from the chloride limit has been granted. The authority to approve future variance requests is delegated to the chairperson.

39. The duration of the interim permit shall be:
   a. To July 1, 2006, or
   b. Until treated wastewater is available and acceptable for use, or
   c. Until such time that a significant change in permitted, actual, or projected uses or water supply occurs.

40. Action on any interim permit may be initiated by the Commission or any permittee upon letter request or pursuant to §174C-57 Haw. Rev. Stat. (Modification of permit terms).

41. This permit is approved under the assumption that wastewater will become available for reuse as an alternative supply source.

42. Require adherence to the chloride sampling protocol and the submittal of weekly chloride data. The authority to approve variances from the weekly reporting requirement is delegated to the Chairperson.

43. Require adherence to the Conservation Conditions.
44. In the event a water shortage is declared by the Commission, permittees in the <Insert Aquifer System> shall comply with the <Insert Aquifer System> water shortage plan adopted by the Commission.

45. The permittee shall contact the Department of Health, Clean Water Branch and obtain the necessary discharge permit(s).

46. Permit shall be interim and replaces existing WUP for 2051-07 & 11.

47. Applicant shall submit an acceptable archaeological inventory survey report to DHP. If historic sites affected, a plan to mitigate these affects must be accepted by DHP and completed by applicant.

48. Should the well be used for back-up domestic supply, applicant is advised to contact DOH or otherwise ensure safe drinking water quality is maintained.

49. (The permittee) may report monthly pumpage on yearly basis.

50. Prior to issuance of any permits, must submit filing fee for after-the-fact pump installation permit.

51. The term of this permit shall be twenty years from the date of issuance of the permit with a five-year Board review to determine compliance with the provisions of the permit.

52. The amount of water to be withdrawn under this permit shall be 0.19 mgd, averaged annually, for irrigation use. This permitted use of 0.19 mgd when added to a preserved use of 0.27 mgd amounts to a total of 0.46 mgd, averaged annually, which may be withdrawn from well 1646-01.

53. The use authorized by the permit must not interfered substantially and materially with existing individual household uses and existing uses.

54. The use of this well shall be subject to the shortage and emergency powers of the Board of Land and Natural Resources (BLNR).

55. This permit may be suspended or revoked, in accordance with Chapter 166.

56. The permit holder may be required to relinquish this permit to BLNR, in accordance with Chapter 166.

57. The withdrawal from Well 1646-10 shall be recorded and reported to DLNR on a monthly basis by the permittee.

58. In the event that emergency water use occurs, the permittee shall notify the Commission in writing within one (1) day of pumping, to in form the Commission as to the nature of the emergency and the expected duration of the emergency. A water
use report shall also be filed pursuant to Standard Condition 10 and Administrative Rule 13-168-7.

59. Note DOH’s requirements related to non-potable water systems (attached to original permit).

60. Standard Condition 16 requiring the submittal of a water shortage plan is waived.

61. All non-potable spigots and piping shall be clearly labeled as “DO NOT DRINK, NON-POTABLE” to prevent direct human consumption.

62. Standard Condition 10 is modified. Due to the inability to take water level measurements, the requirement to measure monthly water levels is waived. In addition, as long as the U.S. Geological Survey is collecting and analyzing the chloride content of the well water, the requirement for the permittee to measure and report chlorides is also waived.

63. Well elevation components must be surveyed by a licensed surveyor and this information must be submitted to commission prior to issuance of permanent permit.

64. The permittee shall obtain approvals from the Department of Health and the U.S. Environmental Protection Agency prior to use of the water.

65. This water use permit, WUP No. <Insert #>, shall supersede WUP No. <Insert #>.

66. WUP No. <Insert #> is revoked

67. Standard Condition 17 is waived.

68. Standard Condition 22 for interim water use permits shall not apply.

69. To supplement our records, we request that you provide a map of the Galbraith Est. lands west of Wahiawa (2100 ac+) and the associated TMK’s for use area.

70. Deferred action on portion requested for golf course irrigation pending further refinement of irrigation requirement and a feasibility study for utilization of surface water sources, including Wahiawa Reservoir.

71. Written justification be provided for any 'cushion' of 0.5 mgd.

72. The water use permit shall be an interim permit. The duration of the interim permit shall be until treated wastewater is available and acceptable for use. The permittee shall continue discussions with Honolulu Board of Water Supply regarding the use of reclaimed water.

73. The permittee is put on notice that this is a qualified approval in that this permit may be modified or revoked prior to the expiration of the interim permit if the
Commission decides that the use of additional basal ground water for dust control and landscape irrigation is not reasonable-beneficial use.

74. The permittee encouraged to use drought-tolerant landscaping to conserve water.

75. Should the applicant provide written evidence that the county DHCD approves a 201E exemption for the elderly affordable housing project then the applicant may modify a corresponding portion of their existing aquacultural use to be used by the exemption approved project within the Commission approved water use permit limits under recommendation 5.

76. The applicant shall obtain a water lease/permit from Land Division prior to actual use of the well water.

77. Require the permittee to sign a contract by May 14, 1998 with the City Department of Wastewater Management to buy and use 0.400 mgd of R-1 water for a corresponding reduction in allocation for Well Nos. 1900-02, 17 to 20, and 1901-03.

78. Standard Condition 9 is waived.

79. Standard Condition 10 is modified to exempt the permittee from monthly measurements of salinity and temperature.

80. Standard Condition 10 is waived.

81. Applicant must seek a determination from BLNR and Land Mgt Div as to whether water license required. If required, license must be obtained prior to issuance of permit. If not, permit will be issued w/out further action.

82. Commission defers action on use in excess of 452,000 gpd pending additional info from BWS and further staff analysis.

83. The permit shall be subject to the Commission's sustainable yield review by December 1990.

84. The Commission shall delegate to the Honolulu Board of Water Supply the authority to allocate the use of water for municipal purposes, in accordance with §174C-48(b) HRS.

85. Honolulu Board of Water Supply shall be exempt from the requirements of permit modifications as provided in §174C-57.

86. BWS must participate in discussions, to be coordinated by Commission Staff, regarding a monitoring program to address impacts to Kaneohe Bay water quality, prior to any action on applications for future municipal uses.

87. A pump installation permit application must be made and approved prior to the installation of a permanent pump.
88. The water withdrawn shall be 0.7 mgd for municipal use.

89. The installed pump capacity of the well shall not be more than 700 gpm or 1.01 mgd.

90. The term of permit shall automatically expire twelve months from the date of issuance.

91. The Honolulu Board of Water Supply may continue to submit monthly water data on their own form, provided that the data are submitted in a format that is acceptable to the Commission staff.

92. Standard Condition 7 shall not apply.

93. Standard Condition 22 shall not apply.

94. Standard Condition 10 is modified to exempt the permittee from monthly measurements of salinity and temperature.

95. This permit shall be subject to conditions providing for stream restoration if the Commission determines that additional water should be returned to the streams.

96. HECO 1 mgd for industrial use

97. Campbell Estate 1 mgd for municipal use through BWS, by separate agreement with HECO

98. BWS 1 mgd for municipal use.

99. The permit shall be subject to the Commission’s sustainable yield review by <Insert Date>.

100. The applicant shall obtain the current version of the Department of Health’s Guidelines Applicable to Golf Courses in Hawaii. Where relevant and viable, items of the guidelines should be implemented and sustained appropriately. To obtain the current version, contact the Safe Drinking Water Branch, Environmental Management Division at (Honolulu).

101. The future use portion of the application shall be deferred until existing uses in the Koolauloa area are established.

102. The water to be withdrawn under this permit shall be a total of 0.03 mgd (0.02 mgd preserved plus an additional 0.01 mgd permitted use), averaged annually, for domestic and irrigation use.

103. Existing well 1851-09 shall be properly sealed by a licensed drilling contractor. A well modification permit application, enclosed, shall be submitted to the Department for approval of the well sealing. A filing fee for sealing the well will not be required.
104. The permittee is required to test the source using a certified private laboratory and submit the test results to the Commission within three (3) months. The Commission will then forward the results to the Department of Health for their review. The Department of Health recommends that the well be routinely tested for microbiological and chemical parameters thereafter.

105. The permittee is required to submit a completed Registration of Well and Declaration of Water use by <Insert Date>.

106. The permittee shall contact the Department of Health for a written determination on the status of their water system and comply with any Department of Health requirements for monitoring and testing.

107. In the event that the original spring source decontaminates, the new well authorized will be shut down.

108. That within each aquifer the total permitted use shall not exceed the sustainable yield.

109. That any water available for allocation shall be for in-district use.

110. That scheduled reductions to Oahu Sugar Co. permitted use shall be initiated upon final termination of an Osco lease or sub-lease, whichever occurs later.

111. That permits for water use issued in accordance with the proposed schedule shall be interim permits subject to review and adjustment by 1995.

112. That the permit shall be an interim permit for a new use which is afforded to existing users as specified in §13-171-20.

113. That the original allocation of 0.200 mgd shall be taken to hearing for possible revocation at a later date to complete the transfer of the water use permit entirely to Well No. 3407-02. This revocation would reduce the current allocation afforded to the Kunihiro Well (Well No. 3406-06) to zero.

114. This allocation incorporates the unspecified domestic needs of the applicant and therefore necessitates a single meter be installed at the well.

115. Should any impacts to nearby wells or streams be established by the use of this well, the applicant shall address these issues to the satisfaction of the Commission.

116. If an economically feasible nonpotable source is identified, the applicant shall convert to the alternative nonpotable source.

117. The permit shall be subject to the Chairperson's approval of a water use plan recommending possible measures to prevent or minimize saltwater contamination and establish courses of action to follow should the aquifer become to saline to use.
118. Permittee shall provide the necessary end-use information on the 10th residence to allow regulation of the use under Chapter 174C.

119. Standard Conditions 10 & 18 shall not apply.

120. Standard Condition 10 is modified to exempt the permittee from the requirement to install a flowmeter. Salt water withdrawals may instead be estimated based on pumping capacity and run time.

121. The applicant shall review the existing year long period of pumpage and streamflow data and provide analysis on ground and surface water interaction. Deadline is January 25, 1994.

122. The water use permit for Well Nos. 2301-27 to -32 for 0.75 mgd (WUP No. 419) shall be revoked upon issuance of a pump installation permit for the well.

123. The permittee shall use mulching to decrease evaporative losses and manage irrigation scheduling to minimize water demand.

124. The permittee shall submit a detailed agricultural plan to support any future water use permit application for increased agricultural use at this parcel.

125. If not already obtained, the permittee shall seek and obtain any necessary permits from the Department of Health for the proposed discharge to Malaekahana Stream.

126. Standard Condition 10 is modified to waive the requirement for installing a water meter on Well Nos. 2358-21, 22, and 29. The permittee shall install a water meter on Well No. 2358-26 to measure total monthly flow through the discharge line. This quantity should then be assumed to be the rate of natural flow from the other three wells for monthly reporting purposes.

127. The permit shall be effective upon submittal of documentation by Navy that it has met the DOH requirements for a public system.

128. This WUP shall be subject to Army's application for a WUP to reduce the permitted use of the Army's Schofield Shaft (2901-02 to 04, 10) by 0.208 mgd to a new total of 5.648 mgd. The Army's application shall be submitted within 60 days after the approval of this WUP or this WUP shall be void. Approval of the modification request shall be obtained from the CWRM prior to use of Well No. 3100-02 and issuance of this WUP.

129. Navy shall submit an after-the-fact PIPA, and approval of the permit shall be obtained prior to use of the well.

130. The well shall not be used for drinking water purposes unless it is properly tested and treated.
131. This permit is approved subject to reclaimed water becoming a practical alternative and provided that the Department of Health approves the reuse application.

132. Should any opae ula be recovered in the well water, the permittee shall notify the Division of Aquatic Resources and provide specimens to the Division of Aquatic Resources for analysis.

133. If a single meter at the well is used, the Commission shall allow an additional 1,000 gallons per day to the water use permit amount for the domestic needs of two residences, although a permit for individual domestic consumption is not required. Otherwise, the applicant must provide a meter to separately measure the irrigation consumption.

134. This permit is approved under the requirement that conversion to either: 1) treated wastewater becoming available for reuse as an alternative supply source, provided that Department of Health concerns over the use of treated effluent over the potable water aquifer have been addressed; and/or 2) other nonpotable source becoming available will occur in a timely manner.

135. These permits shall be subject to a review of actual use within four years for possible modification of the permitted amount.

136. The permit shall be reviewed in two (2) years for possible additional revocation due to nonuse.

137. The allocation is based on the projects listed in Exhibit 5 (of Item 10 of the May 20, 1998 Staff Submittal), except for the Queen’s Beach GC (TMK 139-11-2,3), Lot 9 (TMK 139-17-51), and Varsity Place (TMK 128-24-35).

138. Kamehameha Schools Bishop Estate/Honolulu Board of Water Supply shall transfer the water use permit within ninety (90) days of the effective date of the transfer of the pump station to the Honolulu Board of Water Supply, pursuant to §174C-59 Hawaii Revised Statutes.

139. The permittee shall ensure that the water is recycled by either directing it into the Waiahole Ditch for use by downstream farmers (subject to the approval of the Agribusiness Development Corporation’s Board) or into Waikele Farm’s existing irrigation system.

140. The permittee shall file a completed application to modify WUP No. 758 to reduce the allocation by 0.100 mgd within 60 days. If a completed water use permit modification application is not received within 60 days from this submittal’s date, then the subject water use permit application (WUPA No. 767) shall be deemed denied without prejudice without the need for another hearing.

141. The water withdrawn shall be for municipal use. No improvements to the existing sources are required as the existing source capacities are greater than the increase.
142. Water license must be determined through LM.

143. Proposed other uses will be considered at a later date.
15 Dec. 11 11 mg u/ KC = NS ag use

Priority now for Pump 8 - building collapsing, scarp in water (hazard) (2 wells) - total investment $15,000 + hydro

Pump 3 battery of

Opacities Res: 60-70 mg

2500 ac, diversified, Georgia/Kepu lease mechanisms

2300 ft, 400 below cattle market
Aloha Kaeo,

Mr. Charley Ice called our office today to request a North Shore Field Visit.

I asked him to recap this request in the email below, which would be the most effective communication for everyone involved.

I advised him that your office is closed today for an off-site meeting and that he should be hearing from you shortly.

Mahalo,
Bobbi

From: Charley.F.Ice@hawaii.gov [mailto:Charley.F.Ice@hawaii.gov]
Sent: Friday, December 09, 2011 10:23 AM
To: Barbara Nihipali
Subject: Northshore field visit

Thanks, Bobbi, for helping out with this. I also see that we're having a meeting with some of you folks on the 15th, here in our office. I hope to get a preview, and I'll be in the field the previous day, with other permittees.

We're doing a general review of water use permits in the Northshore area, because we need to revoke the Waialua Sugar allocations and update our files for the next applicants for water use. We'll be taking it to the Water Commission, and want to present a review of all permittees, including several small ones. It's also part of a 20-year review required by the Water Code and underway for a few years, with preliminary information gathered by consultants Brown & Caldwell. Our previous written inquiry was answered by your indication that new uses would grow in the coming years, even if current use is below your allocations from wells acquired from Waialua Sugar. For this reason, we would not recommend revocation, but it will be good to present a picture of what is on the ground now. In the future, we'll be needing water use footprints for comparison to new use applications and to avoid confusion from multiple applications.

We'd like to arrange a field visit, possibly next week, to get the lay of the land and get oriented to present and future uses.
This message is the property of Kamehameha Schools and any attachments are confidential to the intended recipient at the e-mail address to which it has been addressed. If you are not the intended recipient, you may not copy, forward, disclose or use any part of this message or its attachments. If you received this transmission in error please notify the sender immediately by e-mail or contact Kamehameha Schools at [contact information redacted] and then delete this message from your system.
July 7, 2010

Mr. Imiola Lindsey  
Kamehameha Schools  
78-6831 Alii Drive, Suite 235  
Kailua-Kona, HI 96740

Dear Mr. Lindsey:

Certificate of Pump Installation Completion for KS Wells B&C (Opaeula Pump3 Battery)  
Well No. 3505-02 & 03 (TMK (1) 6-2-010:001)

We are pleased to inform you that the Pump Installation work permitted for the KS Wells B&C (Opaeula Pump3 Battery) (Well No. 3505-02 & 03) is complete and acceptable. This certificate of pump installation completion allows you to continue pumping your well for reasonable & beneficial water use in accordance with your new Water Use Permit No. 894.

To protect Hawaii’s natural ground water resources for the benefit of all, the following requirements apply to the use of your well:

1. If the well is not in use it must be properly capped.

2. If the well is to be abandoned then the landowner must cause a licensed contractor to apply for a well abandonment permit in accordance with §13-168-12(f), HAR, prior to any well sealing or plugging work.

3. In the event that the well operator and/or landowner changes, the Commission shall be notified prior to the change.

4. In the event the benchmark in the concrete base of the well is altered in any way, an updated version of the Well Elevation page of the Well Completion Report Part I shall be submitted to the Commission. If a licensed surveyor had estimated the original benchmark elevation then a licensed surveyor must establish the new benchmark elevation. The Well Elevation portion of the Well Completion Report Part I can be obtained by contacting Commission staff or at www.hawaii.gov/dlnr/cwrm/forms.htm.
5. Your approved pump has a capacity of 600 gpm at a head of 540 ft. In the future, pump replacements of equal or lesser capacity will not require an additional permit from the Commission, but will require the submission of a Well Completion Report Part II by the licensed pump installer. If the pump replacement is greater than the existing pump, you will need to apply for a new pump installation permit.

6. The landowner shall cause the well operator to maintain the installed 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 monthly and reported to the Commission on a monthly basis, on forms provided by the Chairperson (attached), in accordance with §13-168-7, HAR. Blank water use report forms are also available at www.hawaii.gov/dlnr/cwrm/resources_permits.htm

7. 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. The authorization to drill a well and/or install a pump shall not constitute a determination of correlative water rights. The landowner and well operator are notified that the quantity of water taken from the well and/or the pump capacity could be reduced by the Commission in the future.

Because ground water in Hawaii is a public trust, and adverse effects at one well may affect other water resources, any violation of the above conditions or any other provision of the Hawaii Administrative Rules may be subject to fines of up to $5,000 per day. The Commission needs your help and asks that you to do your part in utilizing this shared resource. We prefer to work with you in meeting the goal of protecting our ground water resources together.

If you have any questions, please contact Charley Ice of the Commission staff at or toll-free at (Hawaii), extension 70218.

Sincerely,

LENORE N. OHYE
Acting Deputy Director

CI:ss
Encl: Water Use Report Forms

c: Honolulu Board of Water Supply
   Beylik Drilling and Pump Services, Inc.
July 7, 2010

Mr. William Moore
Beylik Drilling and Pump Services, Inc.
91-259A Olai Street
Kapolei, HI 96707

Dear Mr. Moore:

Well Completion Report Part II for Well Nos. 3505-02 & 03

We received your Well Completion Report Part II for the KS Wells B & C (Opaeula Pump 3 Battery) (Well Nos. 3505-02 & 03) on May 10, 2010 for your pump replacement and acknowledge that it is complete. This completes your obligations under pump replacement installation reporting requirements. Additionally, a certificate of pump installation completion will be issued to the well operator/landowner to officially recognize the current details of the installed pump, and a copy will be sent to you.

If you have any questions, please contact Charley Ice of the Commission staff at [redacted].

Sincerely,

LENORE N. OHYE
Acting Deputy Director

CI:ss

c: Kamehameha Schools
Pump Replacement for Well No. 3505-02&03 (GW regulation)

1. From Roy ___(initial)

**Pump Tests Check (special condition of PIP? Yes/No)**

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>If no, describe deficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step-Drawdown Test:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>followed WCPI Stds</td>
<td>☐</td>
<td>☐</td>
<td>☐&lt;70 gpm no test required</td>
</tr>
<tr>
<td>analysis attached</td>
<td>☐</td>
<td>☐</td>
<td></td>
</tr>
<tr>
<td>Aquifer Pump Test:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>followed WCPI Stds</td>
<td>☐</td>
<td>☐</td>
<td>☐&lt;50 gpm no test required</td>
</tr>
<tr>
<td>T &amp; S analysis attached</td>
<td>☐</td>
<td>☐</td>
<td></td>
</tr>
</tbody>
</table>

Potential Well Interference: ☐ ☐ If yes, stream names: |
Potential Stream Impacts: ☐ ☐ |
Additional Testing or Data Required: ☐ ☐ |
Pump Test Comments Attached: ☐ ☐ |
Proposed Pump Capacity is OK.: ☐ ☐ |

2. **Pump Installation Check** Charley/Ryan ___(initial)

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>NA</th>
<th>If no, describe deficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>data complete followed Special Cond &amp; Elevations well database updated</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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</tbody>
</table>

**ATTACHMENTS FOR ACCEPTANCE:**
1. WCR2 ACCEPTANCE LETTER ☑
2. PUMP INST. COMPLETION CERTIFICATE ☑
3. METER INSTALL. REPORT (IF NECESSARY) ☑
4. WUR FORM (if necessary) ☑
5. USGS MAP UPDATED ☑
6. PARCEL CHECK ☑
7. WELL DATABASE INPUT CHECK ☑
8. PUMP TEST WORKSHEET ☑
9. PUMP As-Built CHECK PRINT ☑

To be sent to driller
To be sent to landowner/operator
Staff internal checks

3. Roy ___(initial) check (Entered WCR 2/PICC accept date into database)
4. Susan H. ___(initial) finalize
5. Ken ___(initial) signature
6. Charley/Ryan File

See edits concerning legal KSNO name.
TO
COMMISSION ON WATER RESOURCE MANAGEMENT
P.O. BOX 621
HONOLULU, HI 96809

DATE: 05/05/2010
JOB NO.: 1630M

ATTENTION: 

KAMEHAMEHA SCHOOLS WELL B - C
WELL COMPLETION REPORT: PART II
STATE WELL NO.: 3505-02-03

WE ARE SENDING YOU: Attached ☑ Under separate cover via __________ the following items:

☐ Shop drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications
☐ Copy of letter ☐ Change order ☐

COPIES DATE NO. DESCRIPTION
1 04/30/10 WCR: PART II - KAMEHAMEHA SCHOOLS WELL B - C
STATE WELL NO.: 3505-02-03

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 ☐ PRINTS RETURNED AFTER LOAN TO US

REMARKS

COPY TO 1630M/C FILE

SIGNED: WILLIAM "BILL" MOORE
PROJECT MANAGER
State of Hawaii  
COMMISSION ON WATER RESOURCE MANAGEMENT  
Department of Land and Natural Resources  
WELL COMPLETION REPORT - PART II  
Pump Installation  

Instructions: Please print in ink or type and send completed report (with attachments, if applicable) to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. The Commission may not accept incomplete reports. This form shall be submitted within 60 days of the completion of work. For assistance, please consult the Hawaii Well Construction and Pump Installation Standards or call the Regulation Branch at For updates to this form or additional information, please visit our website at http://www.hawaii.gov/dlnr/cwrm/  

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<tbody>
<tr>
<td>1. State Well No.</td>
<td>3505-02/03</td>
<td>Well Name: KSB WELL B/C</td>
<td>Island: OAHU</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2. Address:</td>
<td>PAALAAA, WAIALUA, (OAHU) HAWAII</td>
<td>Tax Map Key: 6-2-010-001</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3. Pump Installation Company:</td>
<td>BEYLICK DRILLING &amp; PUMP SERVICE, INC.</td>
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<td>4. Date Pump Installed:</td>
<td>04/09/2010</td>
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<td>5. PERMANENT PUMP INFORMATION</td>
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<td></td>
</tr>
<tr>
<td>Pump Type, Make, Serial No.:</td>
<td>SUBMERSIBLE GOULD SN: 565236</td>
<td></td>
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<tr>
<td>Rated Capacity:</td>
<td>600 gpm at head of: 540 ft.</td>
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<tr>
<td>Motor Type, H.P., Voltage, rpm:</td>
<td>SUBMERSIBLE 125HP- 460 VOLT- 3540</td>
<td></td>
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<tr>
<td>Pump type (check one):</td>
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<tr>
<td>☐ Deep Well Turbine</td>
<td>☐ Rotary</td>
<td>☐ Propeller</td>
<td></td>
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<tr>
<td>☒ Submersible</td>
<td>☐ Rotary-Displacement</td>
<td>☐ Reciprocating</td>
<td></td>
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<tr>
<td>☐ Centrifugal</td>
<td>☐ Rotary-Gear</td>
<td>☐ Impulse</td>
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<tr>
<td>6. Method of flow measurement:</td>
<td>PRIMARY</td>
<td></td>
<td></td>
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<tr>
<td>☒ Flowmeter w/ totalizer</td>
<td>Manufacturer: FLOW SIGNAL Model no. HVT CF Size 6&quot;</td>
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<tr>
<td>☐ Other, explain and attach schematic</td>
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<td>7. Fill in the as-built section on the other side of this sheet.</td>
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<td>8. Attach the rating curve for the installed pump.</td>
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<td>9. Attach photograph of well clearly showing the benchmark on the concrete pad, the well head, and the method of flow measurement.</td>
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<tr>
<td>10. Well Owner Company: KAMEHAMEHA SCHOOLS Contact: IMIOLA LINDSEY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address: 78-6831 ALII DRIVE, SUITE 235 KAILUA-KONA, HI 96740</td>
<td></td>
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<tr>
<td>Phone</td>
<td></td>
<td>Fax</td>
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<tr>
<td>11. Land Owner Company: SAME AS ABOVE Contact: SAME AS ABOVE</td>
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<td>Address: SAME AS ABOVE</td>
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<tr>
<td>Phone: SAME AS ABOVE</td>
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<td>Fax: SAME AS ABOVE</td>
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<td>12. Remarks</td>
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</tbody>
</table>

Pump Installation Contractor (print) BEYLICK DRILLING & PUMP SERVICE, INC. C-57/C-57a/A Lic. No. AC-21896  
Signature |   | Date: 04-28-2010 |
Customer: BEYLIK DRILLING
SO: 565236
Model: 8RJHC
Pump No: 1
Stages: 6
1st Imp Dia: 5.06 in
2nd Imp Dia: 4.25 in
Speed: 3480 RPM
Bench mark elevation surveyed to nearest 0.01 ft. = 51.15 ft. mean sea level

Elevation of top of chase tube = 52.15 ft. mean sea level

Pump intake depth = 65.5 ft. (referenced to bench mark)

Chase tube depth = 60 ft. (referenced to bench mark)

If airline installed, bottom of airline elevation = N/A ft. mean sea level
Attach photos of completed well and concrete pad

SKETCH OF WELL LOCATION
(Referenced to permanent landmark, i.e. building, road, fence, etc.)
Provide Latitude and Longitude of well referenced to NAD83 to nearest second

NAD83:
Latitude: 21 degrees 34 min 58 sec
Longitude: 158 degrees 5 min 35 sec

EXAMPLE
Property Line

Lat: 19°36'45" 11
Long: 154°57'18" 11

WCR1 Form 6/12/07 Page 4 of 5
Well Elevation

Benchmark Elevation 51.15

Attach photos of completed well and concrete pad showing benchmark location.

I certify that the elevation shown above:

1) Was done in accordance with acceptable surveying practices
2) Is accurate to the nearest 0.01 ft.
3) Is referenced to mean sea level

See attached memo from P. Cummins

Surveyor

License No.

Date
KSB WELL "C"

7. AS-BUILT PUMP SECTION  (Please attach as-built if different from diagram provided below)

Bench mark elevation surveyed to nearest 0.01 ft. = 51.05 ft. mean sea level

Elevation of top of chase tube = 52.05 ft. mean sea level

Pump intake depth = 65.5 ft. (referenced to bench mark)

Chase tube depth = 60 ft. (referenced to bench mark)

If airline installed, bottom of airline elevation = N/A ft. mean sea level
Pump Station 3

Well C, looking east with Station 3 in the background

Attach photos of completed well and concrete pad

NAD83:
Latitude: 21 degrees 34 min 58 sec
Longitude: 158 degrees 5 min 35 sec

SKETCH OF WELL LOCATION
(Referenced to permanent landmark, i.e. building, road, fence, etc.)
Provide Latitude and Longitude of well referenced to NAD83 to nearest second
Well Elevation

Benchmark Elevation 51.05

Attach photos of completed well and concrete pad showing benchmark location.

I certify that the elevation shown above:

1) Was done in accordance with acceptable surveying practices
2) Is accurate to the nearest 0.01 ft.
3) Is referenced to mean sea level

See attached memo from P. Cummins

Surveyor  | License No.  | Date

WCR1 Form 6/12/07 Page 5 of 5
Mr. Thomas E. Arizumi  
Department of Health  
Safe Drinking Water Branch  
P.O. Box 3378  
Honolulu, HI 96801  

Dear Mr. Arizumi:

Preliminary Engineering Report  
to Certify Waialua Sugar Company's  
Pump 3 (State Well Nos. 3505-01 to 20)  
as a Source of Drinking Water Supply

We have reviewed the subject report to certify the Pump 3 battery of wells as a source of drinking water for the Kawailoa Camp.

Some of the information in Section 2.1 is incorrect. Authorized use of Pump 3 was reduced from 3.160 million gallons per day (mgd) to 1.552 mgd by action of the Commission on Water Resource Management on June 2, 1993. The report correctly states that 0.108 mgd of the total allocation is designated for domestic use.

If the planned domestic use of the well exceeds 0.108 mgd, then a modification of the permit is required, pursuant to Section 13-171-23 of our Administrative Rules. To convert the system source from Pump 17 to Pump 3, the report states that a new 600 gpm pump will be installed. Section 13-168-12 HAR requires that a pump installation permit be obtained prior to any work being done to replace the pump. Lastly, a modification of the temporary permit for Pump 17 may also be required. Pump 17 has authorized use of 8.630 mgd, of which 0.432 mgd may be used for domestic purposes.

Thank you for the opportunity to review the report. If you have any questions, please contact Lenore Nakama at [redacted].

Sincerely,

[Signature]

RAE M. LOUI  
Deputy Director

LN:ko  
c: Waialua Sugar Company, Inc.
May 17, 1994

The Honorable Keith W. Ahue  
Chairman of the Board  
Department of Land and Natural Resources  
1151 Punchbowl Street  
Honolulu, HI 96813

Dear Mr. Ahue:

SUBJECT: PROPOSED SOURCE OF POTABLE WATER

Enclosed for your review and comments is a copy of the engineering report for the following source:

Waialua Sugar Pump 3  
State Well No. 3505-01 to -20  
Waialua, Oahu

This report has been prepared pursuant to Hawaii Administrative Rules, Title 11, Chapter 20, Rules Relating to Potable Water Systems, section 11-20-29.

The Department of Health will use your comments in determining the potential impacts which may result by the proposed project.

Please submit your comments to the Safe Drinking Water Branch within 30 days from the date of this letter. You may also return the engineering report to this office if you do not need it for future reference.

If you should have any questions, please call the Safe Drinking Water Branch, Engineering Section at [redacted].

Sincerely,

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

Enclosure
Leroy

Please check allocations for Pump 3 & Pump 17. I think we need to modify both sources to reflect change.

Thanks.

Termed use of Pump 3 is 1,200 mgd (Construction approved 1/2/91). See Chuck's letter. Thanks! Send.
The Honorable Keith W. Ahue  
Chairman of the Board  
Department of Land and Natural Resources  
1151 Punchbowl Street  
Honolulu, HI 96813

May 17, 1994

Dear Mr. Ahue:

SUBJECT: PROPOSED SOURCE OF POTABLE WATER

Enclosed for your review and comments is a copy of the engineering report for the following source:

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The Department of Health will use your comments in determining the potential impacts which may result by the proposed project.

Please submit your comments to the Safe Drinking Water Branch within 30 days from the date of this letter. You may also return the engineering report to this office if you do not need it for future reference.

If you should have any questions, please call the Safe Drinking Water Branch, Engineering Section at [phone number].

Sincerely,

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

Enclosure
5/26/94

Leone,

Please check allocations for Pump 3 & Pump 17. I think we need to modify both sources to reflect change.

Thanks,

Permitted use of Pump 3 is 1,552 mgd (reduction approved 6/2/93). See draft letter. Leone

Thanks! [Signature] Send.