**Commission on Water Resource Management**

**Route Slip for Permit Issuance 3/9/11**

**From:** Ryan  
**Date:** 12/14/11  
**Suspense Date:**

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<th>TO:</th>
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<td>Chong, R.</td>
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<td>Kimura, J.</td>
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<td>Tam, B.</td>
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<td>Yoda, K.</td>
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<td>Yoshinaga, M.</td>
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**WELL NUMBER:** 2684-02  
**WELL NAME:** Powers Farm

**Application Type:** BOTH  
1 WCP COVER LETTER  
2 WCP  
3 WELL CHECK PRINTOUT  
proposed well section issues?

**Comments:**

<table>
<thead>
<tr>
<th>Number</th>
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<th>Issues?</th>
<th>If Checked, Send to Applicant</th>
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<td>15</td>
<td>BWS (Oahu)</td>
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</tbody>
</table>

**Notes:**

**Driller:** Rod Diamond  
Diamond Construction and Water Well Drilling  
23379 HCR#3 Box 14073  
Keeau HI 96749

**Phone:**  
**Fax:**  
**Cell:**

**TMK:** 1-3-003:022  
**Pump Capacity:** 25

**Well Owner:** Mark Powers  
**Land Owner:** Mark Powers  
**Comment Deadline:** 9/6/11  
**90-Day Deadline:** 9/6/11

ace = 9/11/11
December 16, 2011

Mr. Rod Diamond
Diamond Construction and Water Well Drilling
HCR#3 Box 14073
Keeau, HI 96749

Dear Mr. Diamond:

Pump Installation Permit
Powers Farm Well (Well No. 2684-02), Kalapana, Island of Hawaii

Enclosed are two (2) originals of your approved Pump Installation Permit for the captioned well(s) that authorize permanent pump installation work for your well(s). As part of the Chairperson's approval, the following special conditions were added and are part of your permit under Permit Condition 14:

**Special Conditions**

1. If the elevation benchmark needs to be altered, the permittee, well operator, and/or well owner shall ensure that the benchmark is transferred (or the well resurveyed) and documentation of the new benchmark shall be submitted to the Commission within sixty (60) days after the pump is installed.

2. Attached for your information are copies of the Department of Health's (DOH) review comments. Please note DOH's requirements related to discharge of effluent from well drilling and testing activities. Also, please contact the Noise Radiation and Indoor Air Quality Branch at [redacted] to check compliance with construction noise permit requirements for this project.

The permittee is responsible for all conditions of the permit. This includes ensuring the submission of a completed Well Completion Report Part II form within sixty (60) days after the pump installation work is completed. Be advised that you may be subject to fines of up to $5,000 per day for any violations of your permit conditions starting from the permit approval date.

Please sign both permit originals and return one copy to the Commission office for our files.

**IMPORTANT** - Pump installation shall not commence until a fully signed permit is returned to the Commission.

If you have any questions, please call Ryan Imata of the Commission staff at [redacted] or toll-free at [redacted] (Hawaii), [redacted] (Kauai), [redacted] (Maui), or [redacted] (Lanai & Molokai), extension 70255.

Sincerely,

WILLIAM J. AILA, JR.
Chairperson

Enclosure

c: Mark Powers (with applicable comments – DOH SDWB, WWB, CWB)
PUMP INSTALLATION PERMIT
Powers Farm Well, Well No. 2684-02

Note: This permit shall be prominently displayed at the site until the work is completed

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management’s Administrative Rules, Section 13-168, entitled “Water Use, Wells, and Stream Diversion Works”, this document permits the pump installation for Powers Farm Well (Well No. 2684-02) at TMK (3) 1-3-003:022, Hawaii, subject to the Hawaii Well Construction & Pump Installation Standards (HWCPIS - February 2004) which include but are not limited to the following conditions:

1. The Chairperson to the Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, at least two (2) weeks before any work covered by this permit commences and staff shall be allowed to inspect installation activities in accordance with §13-168-15, Hawaii Administrative Rules (HAR).

2. No withdrawal of water shall be made other than for testing until a Certificate of Pump Installation Completion has been issued by the Commission.

3. This permit shall be prominently displayed, or made available, at the site of construction work until work is completed.

4. The pump installation permit shall be for installation of a 25 gpm rated capacity, or less, pump in the well. This permanent capacity may be reduced in the event that the pump test data does not support the capacity.

5. A water-level measurement access shall be permanently installed, in a manner acceptable to the Chairperson, to accurately record water levels.

6. The permittee shall install an approved meter or other appropriate means for measuring and reporting withdrawals and appropriate devices or means for measuring chlorides and temperature at the well head.

7. Well Completion Report Part II shall be submitted to the Chairperson within sixty (60) days after completion of work (please contact staff or visit www.hawaii.gov/dlnr/cwrm/resources_permits.htm for current form).

8. The permittee, well operator, and/or well owner shall comply with all applicable laws, rules, and ordinances, and non-compliance may be grounds for revocation of this permit.

9. The pump installation permit application and, if relevant, any related staff submittal approved by the Commission are incorporated into this permit by reference.

10. If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

11. Any variances from the HWCPIS shall be approved by the Chairperson prior to invoking the variance.

12. The work proposed in the pump installation permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than the date the permit expires.

13. The permittee, its successors, and assigns shall indemnify, defend, and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, or death arising out of any act or omission of the applicant, assigns, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit.

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

Date of Approval: December 13, 2011
Expiration Date: December 13, 2013

WILLIAM J. AILA, JR., Chairperson
Commission on Water Resource Management

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed and understand that I shall not commence work until I and the pump installer have signed, dated, and returned the permit to the Commission. I understand that this permit is not to be transferred to any other entity. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $5,000 per day starting from the permit date of approval.

Installer’s Signature: __________________________ C-57, C-57a, or A License #: BC-23379 Date: __________________________
Printed Name: Rod Diamond Firm or Title: Diamond Construction and Water

Please sign both copies of this permit, return one copy to the Commission office, and retain the other for your records.

Attachments
December 16, 2011

Mr. Rod Diamond
Diamond Construction and Water Well Drilling
HCR#3 Box 14073
Keeau, HI 96749

Dear Mr. Diamond:

Well Construction Permit
Powers Farm Well (Well No. 2684-02), Kalapana, Island of Hawaii

Enclosed are two (2) copies of your approved Well Construction Permit for the captioned well(s) that authorize well construction activities but excludes installation work for a permanent pump. As part of the Chairperson's approval, the following special conditions were added and are part of your permit under Permit Condition 17:

Special Conditions

1. Attached for your information are copies of the Department of Health's (DOH) review comments. Please note DOH's requirements related to discharge of effluent from well drilling and testing activities. Also, please contact the Noise Radiation and Indoor Air Quality Branch at [redacted] to check compliance with construction noise permit requirements for this project.

2. Grout sealing of annulus shall be accomplished in lifts of less than 200 ft. and allowed to cure for at least 24 hours before the next lift is poured.

Please refer to the Permit Processes Worksheet (transmitted with your acknowledgement letter) for further information regarding the process of drilling a well and installing a pump.

No withdrawal of water shall be made other than for testing purposes until a certificate of pump installation completion has been issued by the Commission.

Please sign both permit originals and return one copy to the Commission office for our files. For copies of the aquifer pump test worksheet, please call staff or visit www.state.hi.us/dlnr/cwrm/forms.htm.

IMPORTANT - Drilling work shall not commence until a fully signed permit is returned to the Commission. The permit shall be prominently displayed or made available at the construction site during construction. Be advised that you may be subject to fines of up to $5,000 per day for any violations of your permit conditions starting from the permit approval date.

If you have any questions, please call Ryan Imata of the Commission staff at [redacted] or toll-free at [redacted] (Hawaii), [redacted] (Kauai), [redacted] (Maui), or [redacted] (Lanai & Molokai), extension 70255.

Sincerely,

WILLIAM J. AILA, JR.
Chairperson

Enclosures

c: Mark Powers (with applicable comments – DOH SDWB, WWB, CWB)
WELL CONSTRUCTION PERMIT

Powers Farm Well, Well No. 2684-02

Note: This permit shall be prominently displayed at the construction site until the work is completed

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the construction and testing of Powers Farm Well (Well No. 2684-02) at TMK (3) 1-3-003:022, Island of Hawaii, subject to the Hawaii Well Construction & Pump Installation Standards (HWCPIS - February 2004) which include but are not limited to the following conditions:

1. The Chairperson of the Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, at least two (2) weeks before any work authorized by this permit commences and staff shall be allowed to inspect installation activities in accordance with §13-168-15, Hawaii Administrative Rules (HAR).

2. This permit shall be prominently displayed, or made available, at the site of construction work until work is completed.

3. The well construction permit shall be for construction and testing of the well only. The permittee shall coordinate with the Chairperson and conduct a pumping test in accordance with the HWCPIS (the latest pump test worksheet can be obtained by contacting Commission staff or at www.hawaii.gov/dlnr/cwrm/resources_permits.htm). The permittee shall submit to the Chairperson the test results as a basis for supporting an application to install a permanent pump. No permanent pump may be installed until a pump installation permit is approved and issued by the Chairperson. No withdrawal of water shall be made for purposes other than testing without a Certificate of Pump Installation Completion. The permitted pump capacity described on the pump installation permit may be reduced in the event that the pump test does not support the capacity.

4. In basal ground water, the depth of the well may not exceed one-fourth (1/4) of the theoretical thickness (41 times initial head) of the basal ground water unless otherwise authorized by the Chairperson. If it can be shown that the well does not tap basal ground water then this condition may be waived after consultation with and acceptance by Commission staff. However, in no instance can the well be drilled deeper than one-half (1/2) of the theoretical thickness without Commission approval.

5. The permittee shall incorporate mitigation measures to prevent construction debris from entering the aquatic environment, to schedule work to avoid periods of high rainfall, and to revegetate any cleared areas as soon as possible.

6. In the event that historically significant remains such as artifacts, burials or concentrations of shells or charcoal are encountered during construction, the permittee shall stop work and immediately contact the Department of Land and Natural Resources’ State Historic Preservation Division. Work may recommence only after written concurrence by the State Historic Preservation Division.

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

8. The Well Completion Report Part I shall be submitted to the Chairperson within sixty (60) days after completion of work (please contact staff or visit www.hawaii.gov/dlnr/cwrm/resources_permits.htm for current form).

9. The permittee shall comply with all applicable laws, rules, and ordinances; non-compliance may be grounds for revocation of this permit.

10. The well construction permit application and, if relevant, any related staff submittal approved by the Commission are incorporated into this permit by reference.

11. If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.

12. Any variances from the HWCPIS shall be approved by the Chairperson prior to invoking the variance.

13. The work proposed in the well construction permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than the date the permit expires.

14. If the well is not to be used it must be properly capped. If the well is to be abandoned during the course of the project then the permittee must apply for a well abandonment permit in accordance with §13-168-12(f), HAR, prior to any well sealing or plugging work.

15. The permittee, its successors, and assigns shall indemnify, defend, and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, or death arising out of any act or omission of the applicant, assigns, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit.

16. This permit shall apply to the location shown on the application only. If the well is to be relocated, the permittee shall apply for a new well construction/pump installation permit in accordance with §13-168-12(f), HAR.

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

Date of Approval: December 13, 2011
Expiration Date: December 13, 2013

William J. Aila, Jr., Chairperson
Commission on Water Resource Management

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed and understand that I shall not commence work until I have signed, dated, and returned the permit to the Commission. I understand that this permit is not to be transferred to any other entity. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to $5,000 per day starting from the permit date of approval.

Driller’s Signature: __________________________ C-57 License #: BC-23379 Date: __________________________

Printed Name: Rod Diamond Firm or Title: Diamond Construction and Water Well Drilling

Please sign both copies of this permit, return one copy to the Commission office, and retain the other for your records.

Attachment
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<td>Ground Elevation</td>
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<td>Cement Grout</td>
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<td>Grouting Method</td>
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<td>Well Casing</td>
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<td>Thickness of Annular Space</td>
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TO: Russell Tsuji, Administrator  
Land Division

FROM: William M. Tam, Deputy Director  
Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application  
Powers Farm Well (Well No. 2684-02) TMK 1-3-003:022

August 22, 2011

Transmitted for your review and comment is a copy of the captioned Well Construction/Pump Installation permit application.

We would appreciate your comments on the captioned application with regard to the programs, plans, and objectives specific to your division. Please respond by returning this cover memo form by September 6, 2011. If we do not receive comments or a request for additional review time by this date, we will assume you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Ryan Imata of the Commission staff at [redacted].

RESPONSE:

[ ] A water lease/permit is required of this applicant and an application for such will be requested by our division.

[ ] A water lease/permit is NOT required of this applicant.

[ ] A water lease/permit has been obtained by the applicant through lease no. [redacted].

[ ] Other relevant Land Division rules/regulations, information, or recommendations are attached.

[ ] No objections

[ ] Other comments: Original source of private title is Grant 2014 issued prior to statehood.

Contact Person: Gary Martin  
Phone: [redacted]

Signed: Gary Martin  
Date: 9/6/11
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P.O. BOX 621
HONOLULU, HAWAII 96809

August 22, 2011

TO: Honorable Loretta J. Fuddy, A.C.S.W., M.P.H., Director
Department of Health
Attention: Acting Chief, Wastewater Branch
Joanna L. Seto, Chief, Safe Drinking Water Branch
Alec Wong, Chief, Clean Water Branch
Dr. Keith Kawaoka, Office of Hazard Evaluation and Emergency Response

FROM: William J. Aila, Jr., Chairperson
Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
Powers Farm Well (Well No. 2684-02) TMK 1-3-003:022
Well address: 13-503 Kamaili Road

Transmitted for your review and comment is a copy of the captioned Water Construction/Pump Installation permit application.

We would appreciate your comments on the captioned application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. Please respond by returning this cover memo form by September 6, 2011. If we do not receive comments or a request for additional review time by this date, we will assume that you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Ryan Imata of the Commission staff at...

RESPONSE:

This well qualifies as a source which will serve as a source of potable water to a public water system (defined as serving 25 or more people at least 60 days per year or has 15 or more service connections) and must receive Director of Health approval prior to its use to comply with Hawaii Administrative Rules (HAR), Title 11, Chapter 20, Rules Relating to Potable Water Systems, §§11-20-29.

This well does not qualify as a source serving a public water system (serves less than 25 people or more people at least 60 days per year or 15 service connections) and if the well water is used for drinking, the private owner should test for bacteriological and chemical presence before initiating such use and routinely monitor the water quality thereafter. However, if future planned use from this source increases to meet the public water system definition then Director of Health approval is required prior to implementation.

If the well is used to supply both potable and non-potable purposes in a single system, the user shall eliminate cross-connections and backflow connections by physically separating potable and non-potable systems by an air gap or an approved backflow preventer, and by clearly labeling all non-potable spigots with warning signs to prevent inadvertent consumption of non-potable water. Backflow prevention devices should be routinely inspected and tested.

It does not appear that this well will be used for consumptive purposes and is not subject to Safe Drinking Water Regulations.

For the applicant's information, a source of possible wastewater contamination is not located near the proposed well site (information attached).

An NPDES permit is required.

Other relevant DOH rules/regulations, information, or recommendations are attached. One-Stop database screen

In the event that the location of the well changes but is still within the parcel described on this application, our division considers the comments to still be applicable, and we do not need to review the new location.

No comments/objections

Contact Person: Jerry Nunogawa, Eng. in Hilo Phone: 933-0401

Signed: Date: ID760
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<tr>
<th>Property Owner</th>
<th>GREG JOHNSTON</th>
<th>Address</th>
<th>OPHIKA 0 90-778</th>
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<td>Island</td>
<td>HAWAII</td>
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<td>District</td>
<td>PUNA</td>
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<td>Builder or Contractor</td>
<td>SELF</td>
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<td>HOUSE SEWER</td>
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<td>Secondary</td>
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<tr>
<td>Distance From Building</td>
<td>18' Boundary</td>
<td>OVER 9' Stream, Well, Body of Water, Etc.</td>
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<tr>
<td>Diameter (Clear) Ft.</td>
<td>7'</td>
<td>Depth-Ft.</td>
<td>10'</td>
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<td>No. Ft. Down to Water Table</td>
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<td>Ground Slope</td>
<td>SLIGHT</td>
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<tr>
<td>Soil Profile (Starting from Surface)</td>
<td>10' LAYERED ROCK WITH LOOSE</td>
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<td>CINDER LAYER</td>
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<tr>
<td>Type of Wall or Curb</td>
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<td>Reinforced Concrete Cover</td>
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<tr>
<td>Distance from Finished Ground to Top of Cover (Ft.)</td>
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<tr>
<td>Date Certificate Issued</td>
<td></td>
<td>Date Approved</td>
<td>May 23, 1983</td>
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<td>Date Approved</td>
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</tbody>
</table>
TO: Honorable Loretta J. Fuddy, A.C.S.W., M.P.H., Director
Department of Health
Attention: Acting Chief, Wastewater Branch
Joanna L. Seto, Chief, Safe Drinking Water Branch
Alec Wong, Chief, Clean Water Branch
Dr. Keith Kawaoka, Office of Hazard Evaluation and Emergency Response

FROM: William J. Aila, Jr., Chairperson
Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
Powers Farm Well (Well No. 2684-02) TMK 1-3-003:022
Well address: 13-503 Kamaili Road

Transmitted for your review and comment is a copy of the captioned Well Construction/Pump Installation permit application.

We would appreciate your comments on the captioned application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. Please respond by returning this cover memo form by September 6, 2011. If we do not receive comments or a request for additional review time by this date, we will assume that you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Ryan Imata of the Commission staff at [Contact Information].

RESPONSE:

1. This well qualifies as a source which will serve as a source of potable water to a public water system (defined as serving 25 or more people at least 60 days per year or has 15 or more service connections) and must receive Director of Health approval prior to its use to comply with Hawaii Administrative Rules (HAR), Title 11, Chapter 20, Rules Relating to Potable Water Systems, 11-20-29.

2. This well does not qualify as a source serving a public water system (serves less than 25 people or more people at least 60 days per year or 15 service connections) and if the well water is used for drinking, the private owner should test for bacteriological and chemical presence before installing each such use and routinely monitor the water quality thereafter. However, if future planned use from this source increases to meet the public water system definition then Director of Health approval is required prior to implementation.

3. If the well is used to supply both potable and non-potable purposes in a single system, the user shall eliminate cross-connections and backflow connections by physically separating potable and non-potable systems by an air gap or an approved backflow preventer, and by clearly labeling all non-potable spigots with warning signs to prevent inadvertent consumption of non-potable water. Backflow prevention devices should be routinely inspected and tested.

4. It does not appear that this well will be used for consumptive purposes and is not subject to Safe Drinking Water Regulations.

5. For the applicant's information, a source of possible wastewater contamination [in (1)] is not located near the proposed well site (information attached).

6. An NPDES permit is required.

7. Other relevant DOH rules/regulations, information, or recommendations are attached.

8. In the event that the location of the well changes but is still within the parcel described on this application, our division considers the comments to still be applicable, and we do not need to review the new location.

9. No comments/objections

Contact Person: Phone: [Redacted]
Signed: Date: 8/26/11
CWRM Application Source: Powers Farm Well
(Well No. 2684-02)
TMK 1-3-003:022

Safe Drinking Water Branch (SDWB) - Engineering Section

See attached private water wells information sheet.

SDWB Underground Injection Control (UIC) Section

1. Well water quality should be initially and periodically tested for it's acceptable and intended use, especially if for human consumption. Water quality should not be presumed acceptable and unchanging. Land-based activities around the well and within the well’s recharge area may, over time, have an unacceptable effect on the well’s water quality. Well construction materials and related equipment could also affect water quality.
As the owner of a privately-owned well, you should **NOT** assume that water from your well is safe for consumption. It is your responsibility to make sure that your well water is safe to drink. The only way to do this is to have your well regularly tested for bacteriological and chemical contaminants.

There are no regulations controlling water quality in private wells serving individual residences as there are for public water systems (public or privately owned utilities supplying water to 25 or more people or 15 service connections). In other words, there are no enforceable limits for contaminants and no requirements for regular testing. Private wells are often found in rural areas, where many activities such as onsite wastewater disposal can contaminate the ground water.

**U.S. Environmental Protection Agency (EPA) Recommendations**

The EPA recommends that private well owners test their well water each year for such contaminants as Total Coliform Bacteria, Nitrates, as well as any other contaminants that may be of concern in your area. More frequent testing may be appropriate if you suspect a problem. EPA also suggests that you consider testing for pesticides, organic chemicals, and heavy metals before using it for the first time. Please refer to the EPA website on Private Drinking Water Wells at [http://www.epa.gov/safewater/privatewells/faq.html](http://www.epa.gov/safewater/privatewells/faq.html)

**Other Contaminants**

Water testing can be very expensive. It is important that you spend time to identify what other potential contaminants may be of concern. Please refer to the EPA website on Private Drinking Water Wells at [http://www.epa.gov/safewater/privatewells/whayoucando.html](http://www.epa.gov/safewater/privatewells/whayoucando.html) for more helpful information. Be aware of what and how you use and dispose of household and garden chemicals. Also determine the location of nearby septic tanks or cesspools, and agricultural or industrial activities in the area. General information on known chemical contamination of ground water in Hawaii can also be found at the DOH website [www.hawaii.gov/health/environmental/water/sdwb/conmaps/pdf/conmaps05.pdf](http://www.hawaii.gov/health/environmental/water/sdwb/conmaps/pdf/conmaps05.pdf)

**Laboratories**

Local commercial laboratories can be found in the yellow pages of the telephone book under "Laboratories, Analytical." Whenever possible, utilize a laboratory that is certified or approved for the specific drinking water tests and carefully follow their instructions for collecting, storing, and transporting the samples. Just be sure to ask the lab to use EPA approved methods for drinking water analysis. A list of labs certified or approved by the Department of Health can be found at [www.hawaii.gov/health/environmental/water/sdwb/sdwb/pdf/Testing%20Labs.pdf](http://www.hawaii.gov/health/environmental/water/sdwb/sdwb/pdf/Testing%20Labs.pdf). As lab certification status changes constantly, confirm their status when you contact the lab. Please note that the list is limited to currently regulated contaminants in public water systems.

**Results**

Once the lab provides you with the test results, you will be in a better position to determine if your well water is safe to drink or what contaminant you need to treat for. Generally, you should compare the results with Federal ([www.epa.gov/safewater/mcl.html](http://www.epa.gov/safewater/mcl.html)) and State ([www.hawaii.gov/health/environmental/water/sdwb/sdwb/pdf/State%20MCL.pdf](http://www.hawaii.gov/health/environmental/water/sdwb/sdwb/pdf/State%20MCL.pdf)) drinking water standards. Where your test results are greater than the State or Federal maximum contaminant levels, your well water should be considered as **unsafe** for consumption.
Subject: National Pollutant Discharge Elimination System Regulations for the Well Construction/Pump Installation Permit Application(s) for the Subject Well(s)

The Department of Health, Clean Water Branch (CWB) has the following comments for the subject well:

1. For Well-Drilling Activities

Any discharge to State waters of treated process wastewater effluent associated with well drilling activities is regulated by Hawaii Administrative Rules (HAR), Title 11, Chapter 55, Appendix I, effective October 22, 2007, and compiled June 15, 2009. Treated process wastewater effluent covered by this general permit includes well drilling slurries, lubricating fluids wastewater, and well purge wastewater. This general permit does not cover well pump testing. The applicable Notice of Intent (NOI) Forms and filing fee shall be submitted at least 30 calendar days before the start of discharge to the:

Department of Health

Clean Water Branch

919 Ala Moana Boulevard, Room 301

Honolulu, Hawaii 96814-4920

The CWB-NOI Forms are available online at http://www.hawaii.gov/health/environmental/water/cleanwater/forms/genl-index.html. Inquiries may be directed to the CWB at [ ] or by fax [ ].

2. For Well Pump Testing

The discharger shall take all measures necessary to prevent the discharge of pollutants from entering State waters. Such measures shall include, if necessary, containment of initial discharge until the discharge is essentially free of pollutants. If the discharge is entering a stream or river bed, best management practices shall be implemented to prevent the discharge from disturbing the clarity of the receiving water. If the discharge is entering a storm drain, the discharger must obtain written permission from the owner of the storm drain prior to discharge. Furthermore, best management practices shall be implemented to prevent the discharge from collecting sediments and other pollutants prior to entering the storm drain.

3. For Construction Activities Disturbing One (1) or More Acres of Total Land Area

By HAR, Title 11, Chapter 55, Appendix C, effective October 22, 2007, and compiled June 15, 2009, an NPDES permit or Notice of General Permit Coverage is required before the start of the construction activities that result in the disturbance of one (1) or more acres of total land area, including clearing, grading, and excavation. The total land area includes a contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under a larger common plan of development or sale. An NOI (see Comment No. 1, above) shall be submitted 30 calendar days before the start of construction activities.
COMMISSION ON WATER RESOURCE MANAGEMENT
ROUTE SLIP FOR NEW APPLICATIONS

FROM: RYAN
DATE: 14-Jun-11
TO: INIT.
1 FUJII, N.
2 HARDY, R.
3 HOAGBIN, S.
4 IMATA, R.
FOR: INIT.
3 TAM, W.
3 NAKAMA, L.
3 YODA, K.
3 YOSHINAGA, M.
PLEASEx
1 Approval
1 Review & Comment
3 Signature
3 Information

DATE:
KUNIMURA, I.
1 Approval
3 Signature
3 Information

KUNIMURA, I.
3 Approval
3 Signature
3 Information

DATE:
SUSPENSE DATE:
21-Jun-11

PLEASE:
See Me
1 Review & Comment
Take Action
Type Draft attach letter
Type Final, label file folder, update People db
File & Input Issue Date
Xerox __ copies

WELL NUMBER 7684-02
WELL NAME Powers Farm
WUP Number na

☐ WELL CONSTRUCTION ☑ PUMP INSTALLATION ☐ WUPA
☐ WUP Transfer ☐ DEC-ADM97-A1 Modification

ATTACHMENTS FOR APPLICATION PROCESSING - Both applicant & staff generated
1 TRANS. LETTER
2 PERMIT PROCESS TABLE
3 CWRM MAPS
☐ making 1-mile radius and penciling in on hanging 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 DHPC/CDUP/CDU pre-screen
(SMA map printout http://gis.hicentral.com/website/parcelzoning/viewer.htm, or INGRID’S SMA/CD MAP)
(LUC map printout http://luc.state.hi.us/luc_parm.htm., or INGRID’S SMA/CD MAP)

13 EA 343 5(a) triggers? ✓ YES - trigger identified is:
(if triggered, exemption analysis memo must be attached before accepting)

FOLDER:
☑ MADE NEW FILE FOLDER, ATTACHED
☐ FILE FOLDER ALREADY MADE, IN FILE CABINET

INCOMPLETE ACTION DATES:
DATE ACTION
1 4TF

Pump test date for 7684-02?
August 22, 2011

Mr. Rod Diamond
Diamond Construction and Water Well Drilling
HCR #3 Box 14073
Keeau, HI 96749

Dear Mr. Diamond:

Well Construction/Pump Installation Permit Application for Well No. 2684-02

We have received your Well Construction/Pump Installation permit application and filing fee for the Powers Farm Well (Well No. 2684-02). We are processing your past well completion reports, and there are some discrepancies that need to be resolved by you (specifically a pump test for well no. 3558-02). However, we can still process this application for review. If the review warrants the issuance of a permit, we will either send you: 1) the approved permits, or 2) a letter of assurance that the permit will be issued to you once your outstanding completion report issues are resolved to our satisfaction.

The attached table describes the process, responsible parties, and deadline requirements for drilling or modifying a well and installing, modifying, or replacing a pump.

By this acceptance letter, we are also notifying the well operator/landowner that no water may be pumped other than for testing until a certificate of well construction/pump installation completion letter is issued to the well operator and landowner.

The permitted pump capacity described on the pump installation permit may be reduced if the pump test does not support the capacity. No certificate of pump installation will be issued until the Commission determines that the pump capacity will not have adverse effects on the aquifer, other nearby wells, or streams. Thus, you may need to remove the pump and install a smaller pump if the Commission decides a smaller pump is required to protect water resources before you can withdraw water for purposes other than testing.

If you have any questions about your permit application, please contact Ryan Imata of the Commission staff at [phone number] or toll-free at [phone number] (Hawaii), [phone number] (Kauai), [phone number] (Maui), or [phone number] (Lanai & Molokai) extension 70255.

Sincerely,

WILLIAM M. TAM
Deputy Director

RI:ss
Attachment
c: Mark Powers
TO: Honorable Loretta J. Fuddy, A.C.S.W., M.P.H., Director
Department of Health
Attention: Acting Chief, Wastewater Branch
Joanna L. Seto, Chief, Safe Drinking Water Branch
Alec Wong, Chief, Clean Water Branch
Dr. Keith Kawaoka, Office of Hazard Evaluation and Emergency Response
FROM: William J. Aila, Jr., Chairperson
Commission on Water Resource Management
SUBJECT: Well Construction/Pump Installation Permit Application
Powers Farm Well (Well No. 2684-02) TMK 1-3-003:022
Well address: 13-503 Kamaili Road

Transmitted for your review and comment is a copy of the captioned Well Construction/Pump Installation permit application.

We would appreciate your comments on the captioned application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your department. Please respond by returning this cover memo form by September 6, 2011. If we do not receive comments or a request for additional review time by this date, we will assume that you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Ryan Imata of the Commission staff at [contact information]

RESPONSE:

This well qualifies as a source which will serve as a source of potable water to a public water system (defined as serving 25 or more people at least 60 days per year or has 15 or more service connections) and must receive Director of Health approval prior to its use to comply with Hawaii Administrative Rules (HAR), Title 11, Chapter 20, Rules Relating to Potable Water Systems, §11-20-29.

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It does not appear that this well will be used for consumptive purposes and is not subject to Safe Drinking Water Regulations.

For the applicant’s information, a source of possible wastewater contamination is not located near the proposed well site (information attached).

An NPDES permit is required.

Other relevant DOH rules/regulations, information, or recommendations are attached.

In the event that the location of the well changes but is still within the parcel described on this application, our division considers the comments to still be applicable, and we do not need to review the new location.

No comments/objections
August 22, 2011

TO: Russell Tsuji, Administrator  
    Land Division

FROM: William M. Tam, Deputy Director  
      Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application  
         Powers Farm Well (Well No. 2684-02) TMK 1-3-003:022

Transmitted for your review and comment is a copy of the captioned Well Construction/Pump Installation permit application.

We would appreciate your comments on the captioned application with regard to the programs, plans, and objectives specific to your division. Please respond by returning this cover memo form by September 6, 2011. If we do not receive comments or a request for additional review time by this date, we will assume you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application, request additional information, or request additional review time, please contact Ryan Imata of the Commission staff at.

RI: ss
Attachment(s)

RESPONSE:
[ ] A water lease/permit is required of this applicant and an application for such will be requested by our division.

[ ] A water lease/permit is not required of this applicant.

[ ] A water lease/permit has been obtained by the applicant through lease no. ________________________.

[ ] Other relevant Land Division rules/regulations, information, or recommendations are attached.

[ ] No objections

[ ] Other comments:

Contact Person: ___________________________ Phone: ___________________________

Signed: ___________________________ Date: ___________________________
TO: Dr. Puaalaokalani Aiu, Administrator
   Historic Preservation
   Attn: Theresa Donham

FROM: William M. Tam, Deputy Director
      Commission on Water Resource Management

SUBJECT: Well Construction/Pump Installation Permit Application
          Powers Farm Well (Well No. 2684-02) TMK: 1-3-003:022

Transmitted for your review and comment is a copy of the captioned Well Construction/Pump Installation permit application.

We would appreciate your comments on the captioned application with regard to the programs, plans, and objectives specific to your division. Please respond by returning this cover memo form by September 6, 2011. If we do not receive comments or a request for additional review time by this date, we will assume you have no comments.

Please find the attached maps to locate the proposed well. If you have any questions about this permit application or request additional review time, please contact Ryan Imata of the Commission staff at [redacted]. If you require additional information regarding specific information that can be provided by the applicant, please contact the applicant directly at the contact information provided on the application form.

RESPONSE:

[ ] This is a [ ] public (county or state) project [ ] private project and [ ] will [ ] may disturb historic sites.

[ ] We concur that the work described under this permit will not disturb historic sites.

[ ] We do not concur that the work described under this permit will not disturb historic sites. We require the following for our concurrence:

Contact Person: ____________________________ Phone: ____________

Signed: ____________________________ Date: ____________
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This information has been supplied by third parties and has not been independently verified by Hawaii Information Service and is, therefore, not guaranteed. Copyright ©8/10/2011
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<tr>
<td><strong>BUSINESS ADDR:</strong> HCR #3 BOX 14073 KEAAU HI 96749</td>
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<td><strong>MAILING ADDR:</strong></td>
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Click here to enter search criteria for prior complaints history ->
For prior complaints and disciplinary history, contact licensing and business information center at http://pvl.ehawaii.gov/pvlsearch/app?_a=d&_f=n&lictp=CT&licno=23379&off=&nm=RO... 8/12/2011
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**TOTAL** $175.00

**REMARKS:**

LINE (1) Paul’s Well
LINE (2) Nahla Well
LINE (3) Powers Farm Well
LINE (4) Kahanano Well
LINE (5) Lua Wai Well
LINE (6) Well #3 and Well #4
LINE (7) Well #1 and Well #2
LINE (8) 
LINE (9) 
LINE (10) 

Lorrie,
For the Water Commission, I was signing their form and emailing it back - now since this is going to you instead, I will need to make a new form - I'm not going to write individual letters for each well. Please be patient, there are choke people waiting for my reply on everything under the sun.

Rod Diamond <diamond.drilling.pump@gmail.com>
05/27/2011 12:49 PM To Theresa.K.Donham@hawaii.gov cc Subject Re: Conservation Clearance on following Properties
To Theresa.K.Donham@hawaii.gov
cc
Subject Re: Conservation Clearance on following Properties

Ryan,
The Hilo office is closed until June 15th. Therefore Theresa is out. I have showing above what she sent me regarding all of these applications.
Dear Mr. Diamond,

Please except our apologies for late response.

Tax Map Keys:
1-3-003: 022 SLU Agricultural
1-5-031: 069 SLU Agricultural District
2-8-008: 003 SLU Agricultural / Conservation District
3-4-003: 001 SLU Agricultural / Conservation District
4-8-003: 010 SLU Agricultural District
4-8-003: 012 SLU Agricultural District

If you require clarification or further assistance please feel free to contact our office at ~Q8

Mahalo,
Fred Talon
State Land Use Commission
Phone: (808) 587-3822
Fax: (808) 587-3827
E-Mail: ftalon@dbedt.hawaii.gov or ljp@dbedt.hawaii.gov
Website: http://duc.state.hi.us
May 11, 2011

Mrs. Lorrie Diamond
Diamond Drilling & Pump, LLC
HC 3 Box 14073
Kea'au, HI 96749-9229

Dear Mrs. Diamond:

SUBJECT: Special Management Area (SMA) Permitting Requirements
Various Parcels; Hawai‘i

Thank you for your recent email correspondence dated May 4, 2011 requesting Special Management Area (SMA) permitting requirements for the following proposed water well projects.

It is our understanding that your company will be submitting applications for well construction/pump installation permits with the Department of Land and Natural Resources Commission on Water Resource Management. As part of the application, you are requested to obtain the SMA permitting requirements from our office.

For your use and convenience, we have provided the following table. It includes the County Zoning designation, State Land Use designation, and General Plan LUPAG designation. It also indicates whether or not the property is located within the SMA and if any SMA permit is required from the Planning Department for well construction/pump installation.
We have no further comments to offer, at this time.
If you have any questions or if you need further assistance, please feel free to contact Bethany Morrison of this office at [redacted].

Sincerely,

BJ LEITHEAD TODD
Planning Director

cc: Mr. Ryan Imata
State of Hawai‘i
Department of Land and Natural Resources
Commission on Water Resource Management
P.O. Box 621
Honolulu, HI 96809
For Official Use Only:

2011 JUN-8 AM 8:41

STATE OF HAWAI‘I
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
APPLICATION FOR A WELL CONSTRUCTION /
PUMP INSTALLATION PERMIT

MAILED (June 11)

Instructions: Please print in ink or type and send completed application with attachments to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. Application must be accompanied by 10 copies and a non-refundable fee of $25.00 payable to the Dept. of Land and Natural Resources. The Commission may not accept incomplete applications. For assistance, call the Regulation Branch at __________ For further information and updates to this application form, visit http://www.hawaii.gov/dlnr/cwm.

LANDOWNER'S NAME/COMPANY
Mark R. Powers

6. LANDOWNER'S NAME/COMPANY
Mark R. Powers

Landowner's Contact
same

5. WELL OPERATOR'S NAME/COMPANY
same

Well Operator's Mailing Address
PO Box 1496
Soldotna, AK 99661-1496

Pahoa, HI 96778

Well Operator's Phone

Well Operator's Fax

Place Pump

X. Install New Pump.

5. Proposed Work

1. Proposed Pump rating, gpm (gallons per minute)

5 if solar / 20-25 if not

13. Method of new measurement

X. Well is not in Conservation District

Dry Drilled

8. Construction Type

Open Pipe

Well in Conservation District

X. Technique/Completion Report

Shallow

X. Not Required (attach documentation from applicable County Agency)

Tunnel

Abandon/Seal Well

D. An Environmental Assessment was completed, and

X. X Not Required (attach documentation from applicable County Agency)

An Environmental Impact Statement was required and has been accepted (attach letter of acceptance)

Publication date on The Environmental Notice:

Publication date on The Environmental Notice:

A finding of No Significant Impact has been determined (attach letter)

A finding of No Significant Impact has been determined (attach letter)

21. Conservation District Use Permit (CDUP)

X. Required, CDUP # date approved

X. Not Required (attach documentation from OCD)

X. I have checked with OCD about whether or not a CDUP is required

X. I have obtained a CDUP if required in Conservation District

X. I have obtained a CDUP if required in Conservation District

22. Special Management Area Permit (SMA)

X. Required, SMA # date approved

X. Not Required (attach documentation from applicable County Agency)

X. I have not checked with the county about whether or not an SMA Permit is required

23. State Historic Preservation Division (SHPS) and the Department of Land and Natural Resources

I have consulted with SHPS regarding potential impacts of well construction activities on historic sites. I have attached applicable documentation from SHPS

I have consulted with SHPS regarding potential impacts of well construction activities on historic sites.

24. Chapter 343

X. An Environmental Impact Statement was required and has been accepted (attach letter of acceptance)

Publication date on The Environmental Notice:

Publication date on The Environmental Notice:

X. A finding of No Significant Impact has been determined (attach letter)

25. Water Use Permit No. (if applicable)

26. WELL DRILLER (Must be filled out if application is for Well Construction)

27. PUMP INSTALLER (Must be filled out if application is for Pump Installation)

Rodney K Diamond

GCR #3 Box 14073 Keaau HI 96749

BC23379

HCR #3 Box 14073 Keaau HI 96749

March 4, 2011

Phone 966-4128

E-mail diamond.drilling.pump@gmail.com

For employees only:

For Official Use Only:

9. Is this well part of a battery of wells?

X. Yes X. No

14. Proposed Pump installation site

Site Photo

10. Proposed Pump installation site

11. Proposed Pump capacity, gpd (gallons per day)

5 if solar / 20-25 if not

12. Proposed Amount of Withdrawal, gpd (gallons per day)

13. Method of new measurement

Open Pipe

X. Abandon/Seal Well

X. Drilled

X. Install New Pump.

X. Replace Pump

X. Digged

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X. Install New Pump.

X. Replace Pump

X. Digged

X. Install New Pump.
**PROPOSED WELL SECTION** (Please attach schematic if different from diagram provided below)

**Elevation at top of casing:** 324 ft., msl*  
**Hole Diameter:** 8.5 inches.  
**Minimum of 3" Radius & 4" Thick Concrete Pad to contain benchmark surveyed to exceed 0.01 ft.**  
**Ground Elevation:** 323 ft., msl*  

**Grouting method:**  
- Positive Displacement  
- Other  

**Annular space between hole and casing:** (1.5" for positive displacement, 3" for other methods).  
**Rock or Gravel Packing:**  
- Crushed Basalt  
- Rounded Gravel  

**Total Depth:** - 103 ft.  
**Material:**  
- Concrete Grout: 240 ft.  
- Ground Elevation: 0 ft., msl*  

**Estimated Water Level Elevation:** 6.4 ft., msl*  

**Solid Casing:** (90% x (Ground Elev.-Water Level Elev))  
- Total Length: 323 ft.  
- Nominal Diameter: 4.5 in.  
- Well Thickness: 540 in.  
- Bottom Elevation: -20 ft., msl*  

**Open Casing:**  
- Perforated  
- Screen  

- Total Length: 20 ft.  
- Nominal Diameter: 4.5 in.  
- Well Thickness: 540 in.  
- Bottom Elevation: -20 ft., msl*  

**Open Hole:**  
- Length: NA ft.  
- Diameter: NA in.  
- Bottom Elevation: NA ft., msl*  

* The approximate elevation must be referenced to mean sea level (msl) at the time of application filing. Final elevations of well components shall be submitted in the Well Completion/Well Abandonment reports and referenced to a benchmark which has been established by a surveyor licensed by the State.

For non-salt water Basal Wells - bottom elevation of well should not be deeper than 1/4 of aquifer thickness or,  
Bottom Elevation of Well Limit = (Water Elevation - 41 x Water Level Elevation / 4)  
Example: Estimated + 2 ft. Water Level Elev. - > > > Bottom Elevation of Well Limit = (2 - 41 x (2) / 4) = -18.5 ft.

**Solid Casing Material:**  
Carbon Steel: compliant with (check one or more):  
- ANSI/AWWA C200  
- API Spec. 5L  
- ASTM A53  
- ASTM A139  
And compliant with (check one or more):  
- ASTM A242 (or A606)  
- Type E  
- Type S  
- Grade B  
- Other  

ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one)  
- Schedule 40  
- Schedule 80  

PVC Plastic conforming to ASTM F480 and (ASTM D1785 or ASTM D2241): (check one)  
- Schedule 40  
- Schedule 80  
- Schedule 120  

Thermoset Plastic: (check one)  
- Filament Wound Resin Pipe conforming to ASTM D2996  
- Centrifically Cast Resin Pipe conforming to ASTM D2996  
- Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517  
- Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950  
- PTFE Fluorocarbon Tubing conforming to ASTM D3296  
- FEP Fluorocarbon Tubing conforming to ASTM D3296  

**Open Casing Material:**  
Carbon Steel: compliant with (check one or more):  
- ANSI/AWWA C200  
- API Spec. 5L  
- ASTM A53  
- ASTM A139  
And compliant with (check one or more):  
- ASTM A242 (or A606)  
- Type E  
- Type S  
- Grade B  
- Other  

Stainless Steel: (check one):  
- ASTM A409 (production wells)  
- ASTM A312 (monitor wells)  

ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one)  
- Schedule 40  
- Schedule 80  

PVC Plastic conforming to ASTM F480 and (ASTM D1785 or ASTM D2241): (check one)  
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- PTFE Fluorocarbon Tubing conforming to ASTM D3296  
- FEP Fluorocarbon Tubing conforming to ASTM D3296  

WCPI App. Form 8/31/10
Proposed Location for Powers Farm Well
## WELL LOCATION INFORMATION

<table>
<thead>
<tr>
<th>STATE WELL NO. (if already assigned)</th>
<th>Well Name</th>
<th>Island</th>
<th>Latitude</th>
<th>Longitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. WELL NAME</td>
<td>Powers Farm Well</td>
<td>Hawaii</td>
<td>21.36571</td>
<td>-155.02724</td>
</tr>
</tbody>
</table>

### Notes:
- The following is attached before this application is accepted (check if attached):
  - Section 5 of 7.5 Minute Series USGS topographic map (scale 1:24,000) with well location labeled and include the name of the quad map.
  - Property tax map, showing well location referenced to established boundaries.
  - Photograph of the proposed well site.
  - A schematic diagram showing the well site, access road and proposed well infrastructure (if applicable).
- For dug wells, attach a grading plan with cross section profiles showing grading and their grades.

### Well Operator’s Information

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>Phone</th>
<th>Fax</th>
<th>E-mail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mark R. Powers</td>
<td>PO Box 1496, Soldotna, AK 99661-1496</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Landowner’s Information

<table>
<thead>
<tr>
<th>Name</th>
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<th>Phone</th>
<th>Fax</th>
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</tbody>
</table>

## PROPOSED WELL CONSTRUCTION

### Construction Well

- **Construction Type:** Drilled
- **Well No.:** X
- **Well is not in Conservation District:** [ ]

### Proposed Work

- **X:** Construct New Well
- **X:** Modify Existing Well
- **X:** Abandon/New Well

### Proposed Pump Installation

- **Proposed Pump Type:** [ ]
- **Proposed Pump Location:** [ ]
- **Proposed Pump Arrangement:** [ ]

## PROPOSED USE

### Site Photo

#### Site Attributes

- **X:** Domestic Number of units to be served:
- **1:**

### Other Legal Requirements

- **X:** Municipal (water systems serving greater than 25 individuals or 15 service connections)
- **X:** Industrial (describe)
- **X:** Irrigation (describe crop and no. of acres) 13,592 Mixed Tropical Fruits, avocados
- **X:** Military (describe)
- **X:** Other (describe)

## OTHER LEGAL REQUIREMENTS

- **X:** Conservation District Use Permit (CUDP)
  - **Required:** [ ]
  - **Date Approved:** [ ]

- **X:** Natural Resource Area Permit (NRAP)
  - **Required:** [ ]
  - **Date Approved:** [ ]

- **X:** Storm Water Management Permit (SWMP)
  - **Required:** [ ]
  - **Date Approved:** [ ]

- **X:** State Historic Preservation Divison (SHPD) Permit
  - **Required:** [ ]
  - **Date Approved:** [ ]

### Additional Information

- **X:** Aesthetic Impact Statement was required and has been accepted (attach letter of acceptance)
- **X:** Environmental Impact Statement was required

## Summary of Proposed Project

For any additional information, please contact the Department of Land and Natural Resources.

---

**NOTE:** Signing below indicates that the signatures understand and agree that the information provided is accurate and true to the best of their knowledge. Further, the signatures understand that upon permit approval: 1) the proposed work is to be completed within two (2) years of the approval date; 2) the contractor shall submit to the Commission a well completion/landing report within 90 days after the completion date of the permitted work; 3) in the event that the application is not completed correctly, any permit may be suspended until the item is brought into compliance, and any work done while the permit is in suspension may result in fines up to $5000 per day.

## Signature

**Rodney K Diamond**

HCR #3 Box 14073 Keaau HI 96749

Phone: 808-860-1101

E-mail: diamonddrillingperm@gmail.com

*Signature: Rodney K Diamond*

*Print: 10 May 2011*
PROPOSED WELL SECTION (Please attach schematic if different from diagram provided below)

Elevation at top of casing: 324 ft., msl*

Hole Diameter: 8.5 inches.

Minimum of 2' Radius & 4" Thick Concrete Pad (to contain benchmark surveyed to nearest 0.01 ft.)

Ground Elevation: 323 ft., msl*

Cement Grout: 240 ft. (min. 70% of distance from ground elevation to top of water surface or 500 ft., whichever is less.)

Annular space between hole and casing (1.5" for positive displacement, 3" for other methods):
2 in.

Rock or Gravel Packing:
Total Depth: 343 feet.
Material:
X Crushed Basalt
✓ Rounded Gravel

Estimated Water Level Elevation: 6.4 ft. msl*

Solid Casing: (+ 90% x (Ground Elev. - Water Level Elev.))
Total Length: ___ ft.
Nominal Diameter: ___ in.
Well Thickness: ___ S40 in.
Bottom Elevation: ___ ft., msl*

Open Casing:
Perforated Screen

Total Length: ___ ft.
Nominal Diameter: ___ in.
Well Thickness: ___ S40 in.
Bottom Elevation: ___ ft., msl*

Open Hole:
Length: ___ ft.
Diameter: ___ in.
Bottom Elevation: ___ ft., msl*

* The approximate elevation must be referenced to mean sea level (msl) at the time of application filing. Final elevations of well components shall be submitted in the Well Completion/Well Abandonment reports and referenced to a benchmark which has been established by a surveyor licensed by the State.

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HAWAII WEL CONSTRUCTION AND PUMP INSTALLATION STANDARDS to ensure that your as-built is in compliance with applicable standards.

WCPI App. Form 8/31/10