

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



WILLIAM J. AILA, JR.
CHAIRPERSON
WILLIAM D. BALFOUR, JR.
SUMNER ERDMAN
NEAL S. FUJWARA
LORETTA J. FUDDY, A.C.S.W., M.P.H.
JONATHAN STARR
TED YAMAMURA
WILLIAM M. TAM
DEPUTY DIRECTOR

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

November 8, 2012

Ref: 4927-02 & 03.wcp

Ms. Toni Gonsalves
Beylik Drilling & Pump Service, Inc.
91-259 Olai Street #A
Kapolei, HI 96707

Dear Ms. Gonsalves:

Well Construction Permit
CMBY-Wells 1 & 2 (Well Nos. 6-4927-002 & 003), Kahului, Island of Maui

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 586-4700 to check compliance with construction noise permit requirements for this project.

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 Charley Ice of the Commission staff at 587-0251 or toll-free at 984-2400 (Maui), extension 70218.

Sincerely,

A handwritten signature in black ink, appearing to read "William J. Aila, Jr.", written over a printed name and title.
WILLIAM J. AILA, JR.
Chairperson

Enclosures

c: CMBY 2011 Investment LLC (with applicable comments - DOH SDWB, WWB, Maui Dept. of Planning)

WELL CONSTRUCTION PERMIT

CMBY-Wells 1 & 2, Well Nos. 6-4927-002 & 003

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 CMBY-Wells 1 & 2 (Well Nos. 6-4927-002 & 03) at TMK (2) 3-8-008:019, Island of Maui, 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 1 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: **October 22, 2012**

Expiration Date: **October 22, 2014**


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 #: AC-21896 Date: _____

Printed Name: Toni Gonsalves Firm or Title: Beylik Drilling & Pump Service Inc.

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

Attachment

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



WILLIAM J. AILA, JR.
CHAIRPERSON
WILLIAM D. BALFOUR, JR.
SUMNER ERDMAN
NEAL S. FUJIWARA
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DEPUTY DIRECTOR

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

November 8, 2012

Ref: 4927-02 & 03.pip

Ms. Toni Gonsalves
Beylik Drilling & Pump Service, Inc.
91-259 Olai Street #A
Kapolei, HI 96707

Dear Ms. Gonsalves:

Pump Installation Permit
CMBY-Wells 1 & 2 (Well Nos. 6-4927-002 & 003), Pulehunui, Island of Maui

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.

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 Charley Ice of the Commission staff at 587-0251 or toll-free at 984-2400 (Maui), extension 70218.

Sincerely,

A handwritten signature in black ink, appearing to read "William J. Aila, Jr.", written over a horizontal line.
for WILLIAM J. AILA, JR.
Chairperson

Enclosure

c: CMBY 2011 Investment LLC

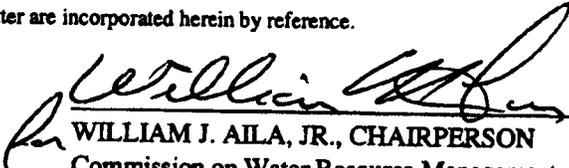
PUMP INSTALLATION PERMIT
CMBY-Wells 1 & 2, Well No. 6-4927-002 & 003

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 CMBY-Wells 1 & 2 (Well Nos. 6-4927-002 & 03) at TMK (2) 3-8-008:019, Maui, 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 300 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/info_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: October 22, 2012
Expiration Date: October 22, 2014


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 #: AC-21896 Date: _____

Printed Name: Toni Gonsalves Firm or Title: Beylik Drilling & Pump Service Inc.

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

Attachments

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



WILLIAM J. AILA, JR.
CHAIRPERSON
WILLIAM D. BALFOUR, JR.
SUMNER ERDMAN
LORETTA J. FUDDY, A.C.S.W., M.P.H.
NEAL S. FLINCHBAUGH
TED YAMAMURA
WILLIAM M. TAM
DEPUTY DIRECTOR

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P.O. BOX 681
HONOLULU, HAWAII 96809

May 21, 2012

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 Kawacka, 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
CMBY Wells 1 & 2 (Well No. 4927-02 & 03) TMK (2) 3-8-008:019

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 June 21, 2012.** 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 Charley Ice of the Commission staff at 587-0218.

CI:ss
Attachment(s)

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 going to its use to comply with Hawaii Administrative Rules (HAR), Title 11, Chapter 20, Rules Relating to Potable Water Systems, §11-20-20.
- 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 processes 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 going 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.
- 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: Darryl Lum

Phone: 586-4309

Signed: Darryl Lum

Date: 5/29/12

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 (808) 586-4309 or by fax (808) 586-4352.

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.

12/2984



WILLIAM J. AILA, JR.
CHAIRPERSON
WILLIAM D. BALFOUR, JR.
SUMNER EROMAN
LORETTA J. FUDDY, A.C.S.W., M.P.H.
NEAL S. FLUSHARA
TED YAMAGUCHI
WILLIAM M. TAM
DEPUTY DIRECTOR

DEPT. OF PLANNING
COUNTY OF MAUI

MAY 23 2012

RECEIVED

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P.O. BOX 621
HONOLULU, HAWAII 96808

May 21, 2012

Mr. William Spence, Director
Planning Department
County of Maui
250 South High Street
Wailuku, HI 96793

RFC 2012/001

Dear Mr. Spence:

**Special Management Area Use Permit Requirements for
Well Construction/Pump Installation Permit Application
CMBY Wells 1 & 2 (Well No. 4927-02 & 03)**

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 SMA permitting requirements specific to your division. **Please respond by returning this cover memo form by June 21, 2012.** 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 Charley Ice of the Commission staff at 587-0218.

Sincerely,

WILLIAM J. AILA, JR.
Chairperson

Cl:ss

RESPONSE:

- This well project requires does not require a SMA. If a SMA is required it has has not been approved and is is not currently active.
- Other relevant rules/regulations, information, or recommendations are attached.
- No objections
- Other comments: Regulations of all applicable governmental agencies should be followed.

Contact Person: Kurt Wollenhaupt Phone: 808 270 1789
Signed: Kurt Wollenhaupt Date: 6/1/12

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



WILLIAM J. AILA, JR.
CHAIRPERSON
WILLIAM D. BALFOUR, JR.
SUMNER BRIDGMAN
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STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P.O. BOX 821
HONOLULU, HAWAII 96808

May 21, 2012

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
CMBY Wells 1 & 2 (Well No. 4927-02 & 03) TMK (2) 3-8-008:019

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 June 21, 2012. 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 Charley Ice of the Commission staff at 587-0218.

CI:ss
Attachment(s)

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 installing 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 DCH 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

Contact Person: MICHAEL YAMAMURA

Phone: 586-4258

Signed: [Signature]

Date: 5/23/12

CWRM Application Source: CMBY Wells 1 & 2 (4927-02,-03)

TMK: (2) 3-8-008:019

Safe Drinking Water Branch (SDWB) - Engineering Section

- This well qualifies as a source that serves a regulated public water system. Federal and state regulations define a public water system as a system that serves 25 or more individuals at least 60 days per year or has at least 15 service connections. All public water system owners and operators are required to comply with Hawaii Administrative Rules, Title 11, Chapter 20, Rules Relating to Potable Water Systems.
- All new public water systems are required to demonstrate and meet minimum capacity requirements prior to their establishment. This requirement involves demonstration that the system will have satisfactory technical, managerial and financial capacity to enable the system to comply with safe drinking water standards and requirements.
- Projects that propose development of new sources of potable water serving or proposed to serve a public water system must comply with the terms of HAR 11-20-29. This section requires that all new public water system sources be approved by the Director of Health prior to its use. Such approval is based primarily upon the submission of a satisfactory engineering report which addresses the requirements set in Section 11-20-29.
- The engineering report must identify all potential sources of contamination and evaluate alternative control measures which could be implemented to reduce or eliminate the potential for contamination, including treatment of the water source. In addition, water

CWRM Well Application Standard Comments (SDWB)

Vers. 9/30/09

quality analyses for all regulated contaminants, performed by a laboratory certified by the State Laboratories Division of the state of Hawaii, must be submitted as part of the report to demonstrate compliance with all drinking water standards. Additional parameters may be required by the Director for this submittal or additional tests required upon his or her review of the information submitted.

- All public water system sources must undergo a source water assessment which will delineate a source water protection area. This process is preliminary to the creation of a source water protection plan for that source and activities which will take place to protect the drinking water source.
- Projects proposing to develop new public water systems or proposing substantial modifications to existing public water systems must receive approval by the Director of Health prior to construction of the proposed system or modification. These projects include treatment, storage and distribution systems of public water systems. The approval authority for projects owned and operated by a County Board or Department of Water or Water Supply has been delegated to them.
- All public water systems must be operated by certified distribution system and water treatment plant operators as defined by Hawaii Administrative Rules, Title 11, Chapter 11-25 titled; Rules Pertaining to Certification of Public Water System Operators.
- All projects which propose the use of dual water systems or the use of a non-potable water system in proximity to an existing potable water system to meet irrigation or other needs must be carefully design and operate these systems to prevent the cross-connection of these systems and prevent the possibility of backflow of water from the non-potable system to the potable system. The two systems must be clearly labeled

CWRM Well Application Standard Comments (SDWB)

Vers. 9/30/09

and physically separated by air gaps or reduced pressure principle backflow prevention devices to avoid contaminating the potable water supply. In addition backflow devices must be tested periodically to assure their proper operation. Further, all non-potable spigots and irrigated areas should be clearly labeled with warning signs to prevent the inadvertent consumption on non-potable water. Compliance with Hawaii Administrative Rules, Title 11, Chapter 11-21 titled; Cross-Connection and Backflow Control is also required.

- All projects which propose the establishment of a potentially contaminating activity (as identified in the Hawai'i Source Water Assessment Plan) within the source water protection area of an existing source of water for a public water supply should address this potential and activities that will be implemented to prevent or reduce the potential for contamination of the drinking water source.

For further information concerning the application of capacity, new source approval, operator certification, source water assessment, backflow/cross-connection prevention or other regulated public water system programs, please contact the Safe Drinking Water Branch Engineering Section at 586-4258.

SDWB Underground Injection Control (UIC) Section

Injection wells used for the subsurface disposal of wastewater, sewage effluent, or surface runoff are subject to environmental regulation and permitting under Hawai'i Administrative Rules, Title 11, Chapter 11-23, titled Underground Injection Control (UIC). The Department of Health's approval must be first obtained before any injection well construction commences. A UIC permit must be issued before any injection well operation occurs.

Authorization to use an injection well is granted when a UIC permit is issued to the injection well facility. The UIC permit contains discharge and operation limitations, monitoring and reporting requirements, and other facility management and operational conditions. A complete UIC permit application form is needed to apply for a UIC permit.

A UIC permit can have a valid duration of up to five years. Permit renewal is needed to keep an expiring permit valid for another term. For further information about the UIC permit and the Underground Injection Control Program, please contact the UIC staff of the Safe Drinking Water Branch at 586-4258.

The UIC Program has the following comments specific to this Application:

1. In general, a shallow well, or a well that recharges quickly from local rainfall, should not be used as a potable water source because such a well increases the risk of having unsatisfactory groundwater quality that when consumed may compromise health. Factors that directly influence a well's groundwater quality include

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wastewater disposal systems (cesspools, septic systems, drainage wells), lawn/garden/crop-growing activities, and even the proximity to the ocean where salt water intrusion may occur.

2. The siting of a drinking water source below the UIC line may restrict new and existing injection well construction. New injection wells will be prohibited within setback areas defined in Chapter 11-23. If this drinking water source will serve a regulated public water system, the applicant will be required to inform landowners located within the setback surrounding the well of this proposed action because it will affect the injection well development potential of their properties.
3. Well water quality should be initially and periodically tested for its 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.

WARNING! 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>

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/whatyoucando.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

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. 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) and State (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.