

State of Hawaii  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
Engineering Division

February 26, 2016

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

**Cancellation of Geothermal Exploration Permit H-01, Hualalai West Rift Zone, Hawaii,  
Issued May 7, 2015 and Rescind BLNR Approval (July 10, 2015, Item L-5) for  
Additional Geothermal Exploration Permit, Hualalai West Rift Zone, Hawaii**

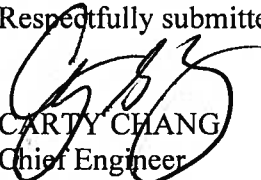
BACKGROUND: In June 2014, the DLNR Engineering Division contracted the University of Hawaii (UH) to continue its magnetotelluric (MT) and gravity surveys supported by funding from the U.S. Department of Energy and DLNR, in the Hualalai area of Hawaii Island. UH submitted an application for a Geothermal Exploration Permit to conduct these non-invasive exploration activities on various parcels located on the Hualalai West Rift Zone; the BLNR approved the application on March 27, 2015 (Item L-2) and Geothermal Exploration Permit H-01 was issued on May 7, 2015. UH subsequently identified additional parcels for surveying and submitted a second application for these sites. On July 10, 2015 (Item L-5), the BLNR approved the application for the second Geothermal Exploration Permit; this second permit has not been issued due to outstanding documentation.

Ralph P. Dedman et al filed a lawsuit claiming that the BLNR should not have issued or approved the permits without requiring the preparation of an environmental impact statement. The lawsuit remains pending.

REQUEST: UH has been unable to progress past the permitting phase due to the loss of funding and key project staff. Due to the uncertainty of future funding support to continue its efforts, UH has requested the cancellation and/or termination of Geothermal Exploration Permit H-01 issued May 7, 2015 and the withdrawal of second permit application.

RECOMMENDATION: That the Board approve the cancellation of Geothermal Exploration Permit H-01, Hualalai West Rift Zone, Hawaii, issued May 7, 2015 and rescind BLNR approval (July 10, 2015, Item L-5) for the additional Geothermal Exploration Permit, Hualalai West Rift Zone, Hawaii.

Respectfully submitted,

  
CARTY CHANG  
Chief Engineer

Attachments: 1 - BLNR March 27, 2015 Item L-2  
2 - Geothermal Exploration Permit H-01 dated May 7, 2015  
3 - BLNR July 10, 2015 Item L-5  
4 - UH Letter dated February 1, 2016

Approved for submittal:

  
SUZANNE D. CASE, Chairperson  
Board of Land and Natural Resources

ITEM L-4

State of Hawaii  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
Engineering Division  
Honolulu, Hawaii 96813

March 27, 2015

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

**Application for Geothermal Exploration Permit  
Hualalai West Rift Zone, Hawaii**  
TMK: (3) 7-1-001:006, 7-2-002:001, 7-2-003:003, 7-2-004:004,  
7-2-005:008, 7-2-007:001, 7-4-002:006, 7-4-002:017 & 18

**APPLICANT:**

University of Hawaii, Hawaii Institute of Geophysics and Planetology  
(c/o Nicole Lautze, Assistant Researcher)

**BACKGROUND:**

In accordance with Hawaii Administrative Rules Chapter 13-183, the University of Hawaii has submitted an application for a Geothermal Exploration Permit to conduct a non-invasive geophysical study of the West Rift Zone of Hualalai, just north of Kailua Kona on the Island of Hawaii.

The proposed exploration activities are for scientific data collection only. The University of Hawaii is proposing to use a standard exploration method called a magnetotelluric survey (MT). Full details about the survey method and the proposed activity are described in the application, attached as **Exhibit 1**.

The proposed project is part of an overall effort referred to as the "Geothermal Resources Exploration Plan for Hawaii" being undertaken by the applicant. The project is being supported by funding from both the U.S. Department of Energy and the Department of Land and Natural Resources. The initial focus of the project will be a MT-based assessment of the Hualalai area and is the first exploration permit application being submitted for this project.

The application has been reviewed by the State Historic Preservation Division and the Office of Conservation and Coastal Lands, who have provided comments noting specific requirements that shall be met by the applicant, prior to the commencement of the proposed survey. These comments are included as part of **Exhibit 2** and the conditions specified therein have been incorporated as part of the attached draft permit (see **Exhibit 3**).

Approved by the Board of  
Land & Natural Resources  
at the meeting held on

ITEM L-2

~~MAR 27 2015~~

w/ amendments

ATTACHMENT 1

The original application had identified additional areas for the project, but since the land use districts in those areas are classified as either Urban or Conservation lands, those particular areas of the project have been omitted from the final project application at the applicants request (see Exhibit 5).

**LOCATION:**

Tax Map Key	State Land	Owner	State Land Use
(3) 7-1-001:006	Yes	State	Agriculture
(3) 7-2-002:001		Kamehameha Schools	Agriculture*
(3) 7-2-003:003		Kamehameha Schools	Agriculture*
(3) 7-2-004:004	Yes	State	Agriculture*
(3) 7-2-005:008	Yes	State	Agriculture
(3) 7-2-007:001		GKK Makalei	Agriculture*
(3) 7-4-002:006		Queen Liliuokalani Trust	Agriculture
(3) 7-4-002:017		Palani Ranch	Agriculture
(3) 7-4-002:018		Palani Ranch	Agriculture

\*Project is restricted to agriculture zoned areas only.

**CHAPTER 343 – ENVIRONMENTAL ASSESSMENT:**

In accordance with Hawaii Administrative Rule Section 11-200-8(A), the subject request is exempt from preparation of an environmental assessment pursuant to Exemption Class No. 5, “Basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resources.” See Exhibit 4.

**RECOMMENDATION:**

That the Board of Land and Natural Resources approve the application for a Geothermal Exploration Permit submitted by the University of Hawaii for non-invasive exploration activities, in the area specified and authorize the Chairperson to issue the permit subject to the following conditions:

- (1) That the University of Hawaii comply with all applicable statutes, ordinances, rules and regulations of the Federal, State, and County governments; and

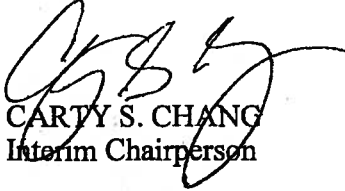
- (2) That the University of Hawaii shall submit evidence of compliance with all other terms and conditions as may be prescribed by the Chairperson prior to the commencement of any proposed work.

Respectfully submitted,



CHRIS T. TAKASHIGE  
Acting Chief Engineer

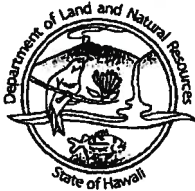
Approved For Submittal:



CARY S. CHANG  
Interim Chairperson

Attachments

DAVID Y. IGE  
GOVERNOR OF HAWAII



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621  
HONOLULU, HAWAII 96809

MAY 08 2015

SUZANNE D. CASE  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE MANAGEMENT

KEKOA KALUHIWA  
FIRST DEPUTY

W. ROY HARDY  
ACTING DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
BUREAU OF CONVEYANCES  
COMMISSION ON WATER RESOURCE MANAGEMENT  
CONSERVATION AND COASTAL LANDS  
CONSERVATION AND RESOURCES ENFORCEMENT  
ENGINEERING  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
KAHOOLAWE ISLAND RESERVE COMMISSION  
LAND  
STATE PARKS

Geothermal Exploration Permit (H-01)  
Hualalai West Rift Zone, Hawaii

To: University of Hawaii at Manoa  
Hawaii Institute of Geophysics and Planetology (HIGP)  
1680 East West Road, POST 526B  
Honolulu, Hawaii 96825

University of Hawaii at Hilo  
The Center for the Study of Active Volcanoes (CSAV)  
200 West Kawili Street  
Hilo, Hawaii 96720

Your application dated December 8, 2014, amended on April 16, 2015, for a permit to explore the West Rift Zone of Hualalai using a non-invasive and passive geophysical methodology is approved.


Exploration activity: Magnetotelluric (geophysics)  
Locations (TMK): (3) 7-1-001:006, (3) 7-2-002:001, (3) 7-2-003:003,  
(3) 7-2-004:004, (3) 7-2-005:008, (3) 7-2-007:001,  
(3) 7-4-002:006 & 017, 018

Approval is granted in accordance with the Department of Land and Natural Resources' (Department's) Administrative Rules, Chapter 13-183, Hawaii Administrative Rules (HAR), and subject to the following conditions:

- (1) All work shall be performed in accordance with the permission and terms of the occupiers of the land, the exploration program submitted with your application, the Department's Administrative Rules Chapter 13-183, HAR, and all other applicable Federal, State, and County laws, ordinances or rules;
- (2) 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 and death arising from 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;

ATTACHMENT 2

- (3) The permittee shall observe and comply with all valid requirements of County, State and Federal authorities and regulations to the land and permittee's operations including but not limited to, all water and air pollution control laws and those relating to the environment;
- (4) The permittee shall notify the Department, in writing, of the start date of field operations at least 48 hours in advance;
- (5) If changes to the proposed exploration program are contemplated, the permittee shall obtain the Chairperson's approval prior to implementing such changes;
- (6) The permittee shall submit to the Chairperson a completion report within 6 months after the expiration of the permit. The report shall include at a minimum
  - a. Project summary. Report shall describe pertinent work done for the project.
  - b. Project history. Report shall include a daily summary of the field activities undertaken during the project.
  - c. Data. Report shall include all the data gathered by the project and any interpretations made of the data.
- (7) This permit shall expire 365 days from the date of issuance.
- (8) The Permittee shall submit to the Chairperson a notice that all requirements outlined by the State Historic Preservation Division (SHPD), by SHPD prior to commencement of any activities in this permit.
- (9) The Permittee shall submit to the Chairperson a notice of permission by the land owners prior to the commencement of any activities in the following TMK: (3) 7-2-004:004, (3) 7-2-005:008.

  
\_\_\_\_\_  
Suzanne D. Case, Chairperson  
Department of Land and Natural Resources

5/7/2015  
\_\_\_\_\_  
Date of Issuance

c: Land Board Member  
Hawaii County Planning Department  
Department of Business, Economic Development and Tourism/Strategic Industries Division  
Eric Tanaka, Engineering Division, Hilo

State of Hawaii  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
Engineering Division  
Honolulu, Hawaii 96813

July 10, 2015

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

**Application for Geothermal Exploration Permit and Declaration of Exemption from Chapter 343, HRS. Hualalai West Rift Zone, Hawaii TMK: (3) 7-3-009:019, 025, 028, (3) 7-3-010:032, 035, 041 (3) 7-4-008:001, 005, 047, 057**

**APPLICANT:**

University of Hawaii at Manoa (Nicole Lautze)  
Hawaii Institute of Geophysics and Planetology (HIGP)  
1680 East West Road, POST 526B  
Honolulu, Hawaii 96825

University of Hawaii at Hilo (Don Thomas)  
The Center for the Study of Active Volcanoes (CSAV)  
200 West Kawili Street  
Hilo, Hawaii 96720

**BACKGROUND:**

At its regular meeting of March 27, 2015, under agenda item L-2, the Board approved the subject matter regarding the issuance of a geothermal exploration permit for certain locations along the Hualalai West Rift Zone. A copy of the approved submittal is attached as **Exhibit 1**.

After March 27, 2015, the applicant has redefined the project in order to maintain the integrity of the study. As such, additional locations along the Hualalai West Rift Zone have been identified for the project. This board action is requesting the approval of additional locations, along the Hualalai Rift Zone, which the applicant has identified they wish to include in the project.

**CHAPTER 343 – ENVIRONMENTAL ASSESSMENT:**

In accordance with Hawaii Administrative Rule, Section 11-200-8(A), the subject request is exempt from the preparation of an environmental assessment pursuant to Exemption Class No. 5, "Basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resources." An accompanying Environmental Assessment Exemption Notification is attached as **Exhibit 2**.

**Approved by the Board of  
Land & Natural Resources  
at the meeting held on  
JUL 10 2015**

ITEM L-5

MIA/HEADY 2

**LOCATION:**

A map of the project location is attached as **Exhibit 3**.

<b>Tax Map Key</b>	<b>This Board Action</b>	<b>Previously Approved</b>	<b>Owner</b>	<b>State Land Use</b>
(3) 7-1-001:006		Yes	State	Agriculture
(3) 7-2-002:001		Yes	Kamehameha Schools	Agriculture*
(3) 7-2-003:003		Yes	Kamehameha Schools	Agriculture*
(3) 7-2-004:004		Yes	State	Agriculture*
(3) 7-2-005:008		Yes	State	Agriculture
(3) 7-2-007:001		Yes	GKK Makalei	Agriculture*
(3) 7-3-009:019	Yes		RCFC Kaloko Heights, LLC	Agriculture
(3) 7-3-009:025	Yes		SCD-TSA Kalako Makai	Agriculture*
(3) 7-3-009:028	Yes		SCD-TSA Kalako Makai	Agriculture
(3) 7-3-010:032	Yes		State	Agriculture
(3) 7-3-010:035	Yes		AIC Kona, LLC	Agriculture
(3) 7-3-010-041	Yes		State - DHHL	Agriculture
(3) 7-4-002:006		Yes	Queen Liliuokalani Trust	Agriculture
(3) 7-4-002:017		Yes	Palani Ranch	Agriculture
(3) 7-4-002:018		Yes	Palani Ranch	Agriculture
(3) 7-4-008:001	Yes		Queen Liliuokalani Trust	Agriculture*
(3) 7-4-008:005	Yes		Lanihau	Agriculture
(3) 7-4-008:047	Yes		327 Kona, LLC	Agriculture
(3) 7-4-008:057	Yes		Lanihau	Agriculture

\*Project is restricted to agriculture zoned areas only.

**RECOMMENDATION:**

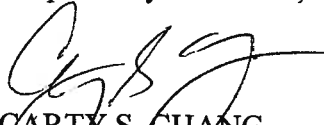
That the Board of Land and Natural Resources:

- (1) Authorize the approval and issuance of a Geothermal Exploration Permit submitted by the University of Hawaii for non-invasive exploration activities in the areas specified; and
- (2) Authorize the Chairperson to issue a Geothermal Exploration Permit subject to terms and conditions as may be prescribed by the Chairperson to best serve the interests of the State; and
- (3) Declare this project exempt from the preparation of an environmental assessment pursuant to Chapter 343 HRS and Chapter 11-200 HAR; and




- (4) Authorize the Department to oversee the performance of the permitted work and take appropriate action including but not limited to modification to permit documents or conditions, issuance of fines and/or revocation of the permit, if necessary.

Respectfully submitted,



CARY S. CHANG  
Chief Engineer

Approved For Submittal:



SUZANNE D. CASE  
Chairperson

- Exhibits:
1. March 27, 2015 Approved Board Action
  2. EA Exemption Notification
  3. Project Map



UNIVERSITY  
of HAWAII  
HILO

February 1, 2016

Mr. Carty Chang  
Chief Engineer  
Engineering Division  
Department of Land and Natural Resources  
P.O. Box 373  
Honolulu, HI 96809

Aloha Carty:

Thank you for your letter of December 17, 2015, inquiring about progress on and status of the **Geothermal Exploration Permit (H-01), Hualalai West Rift Zone, Hawaii** dated May 7, 2015 (1<sup>st</sup> Permit) and the **Additional Geothermal Exploration Permit, Hualalai West Rift Zone** (2<sup>nd</sup> Permit) (issuance pending).

Unfortunately, we have to report that we have been unable to progress on the proposed project beyond the permitting process. After receiving the 1<sup>st</sup> Permit, we had discussions with your department with respect to substituting alternate field sites to replace those sites listed in the 1<sup>st</sup> Permit that were located within the Conservation and Urban Districts. Such a substitution required us to apply for the 2<sup>nd</sup> Permit, which would have amended the 1<sup>st</sup> Permit. Because of this, we elected to delay the field program until we had approvals for the entire regional survey (which would have required the issuance of the 1<sup>st</sup> Permit and the 2<sup>nd</sup> Permit), rather than starting and stopping the field effort, or conducting an incomplete field survey with major gaps. However, as a result of the delay, the grant agreement under which the project funding had been provided expired, effective June 30, 2015.

Pursuant to earlier discussions with your department, we had anticipated approaching DBEDT for additional funding support to complete the project. We did request additional funds from DBEDT, but were informed that there were no funds available to support this work.

Hence, we do not currently have funds to: (a) proceed with the field work permitted under the 1<sup>st</sup> Permit or (b) cover the additional staff time and contracted archaeological inspections required to complete the work under the 2<sup>nd</sup> Permit. With respect to those costs, we would anticipate that they would be substantial based on the expenditures for developing the information required under the 1<sup>st</sup> permit.

The costs that had been incurred for the project are set forth in the attached final invoice (which had been submitted near the end of July of last year). Virtually all of the costs were incurred in connection with applying for and processing the applications for the 1<sup>st</sup> Permit and the 2<sup>nd</sup> Permit. As part of the application process, the University was required to: (a) obtain rights of entry agreements and permissions from owners of the land underlying the proposed test sites and (b) complete archaeological inspections of each such site prior to initiating field surveys.

200 West Kāwili Street  
Hilo, HI 96720-4091  
Telephone: (808) 974-7631  
Fax: (808) 974-7677  
Web: [hilo.hawaii.edu/~csav/](http://hilo.hawaii.edu/~csav/)  
An Equal Opportunity/Affirmative Action Institution

ATTACHMENT 4

Mr. Carty Chang  
Department of Land and Natural Resources  
February 1, 2016  
Page 2

There were between 65-70 proposed test sites covering about 400 square kilometers, and involving 40-50 different landowners. The cost to complete this effort was significant and is reflected in the labor costs incurred.

The cost of direct labor for this project includes the following categories: direct labor, fringe benefits, and scholarships and fellowships. This last category is stipend support for the Post Doctoral trainee who was overseeing the field work and managing the project. The other labor costs covered work done by University employees assigned to the Hawai'i Institute of Geophysics and Planetology and the Center for the Study of Active Volcanoes. If anything, the labor costs are somewhat understated as I did not include any of my (University-supported) time on the project. The "Services – Fee Basis" category covered the costs incurred for the archaeological inspections of the potential testing sites, including the procurement and contracting process.

In addition to the funding challenges, project personnel in major roles are no longer available to the project. For example, the Post Doctoral appointee/project manager came to the end of her appointment at the University and took a permanent position on the mainland. One of my colleagues who was planning on performing much of the project data processing and analysis unexpectedly passed away this past November.

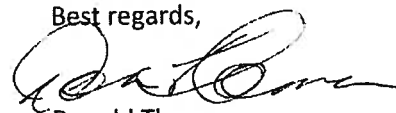
Given the absence of funding in the foreseeable future to conduct the proposed fieldwork and surveys, as well as the substantial delays that will be associated with recruitment and/or reassignment of new project staff to replace those recently lost, we don't anticipate being in a position to undertake the proposed fieldwork and surveys under the 1<sup>st</sup> Permit, or complete the work required under the 2<sup>nd</sup> Permit, until well after the term of the 1<sup>st</sup> Permit has expired.

Although I am not familiar with your department's standard protocol for dealing with projects that are no longer going forward under either issued permits or pending permits, we can only say that the current delay in progress will be of indefinite duration. Hence, we request that you end, cancel, and/or terminate the already-issued 1<sup>st</sup> Permit. We also request the withdrawal of our application for the 2<sup>nd</sup> Permit. Your confirmation regarding the University's termination of the 1<sup>st</sup> Permit and its withdrawal of the 2<sup>nd</sup> Permit application will be greatly appreciated.

Although I think all of us would have preferred a more productive outcome from this effort, at the same time, we have to accept circumstances that are beyond our control and respond accordingly. We look forward to working with you to bring this matter to an expeditious and mutually agreeable closure.

Thank you.

Best regards,



Donald Thomas



## UNIVERSITY OF HAWAII

Office of Research Services  
2440 Campus Road, Box 368  
Honolulu, Hawaii 96822

Invoice No: CG 1510757

**FINAL INVOICE**

**Please include Invoice Number with Check or Wire Payment**

SPONSOR: DEPARTMENT OF LAND & NATURAL RESOURCES  
STATE OF HAWAII  
ENGINEERING DIVISION  
P.O. BOX 373  
HONOLULU HI, 96809  
US

DATE: 07-21-2015  
UH PROPOSAL NUMBER: 32716

PAYMENT IS HEREBY REQUESTED FOR:

AWARD NUMBER: C43149  
PROJECT ENTITLED: MAGNETOTULLURIC & GRAVITY SUREYS  
PERIOD: 06-01-2015 - 06-30-2015

TOTAL AMOUNT

\$15,297.36

	CURRENT AMOUNT	CUMULATIVE AMOUNT
DIRECT LABOR	\$3,456.95	\$13,827.80
FRINGE BENEFITS	\$1,407.23	\$5,786.18
SERVICES - FEE BASIS	\$5,931.15	\$5,931.15
MATERIALS & SUPPLIES	\$384.06	\$384.06
TRAVEL - DOMESTIC	\$0.00	\$0.00
TRAVEL - INTERNATIONAL	\$0.00	\$0.00
PRINTING & PUBLICATION	\$0.00	\$0.00
UTILITIES & COMMUNICATION	\$0.00	\$0.00
RENTALS	\$0.00	\$0.00
REPAIRS	\$0.00	\$0.00
TUITION	\$0.00	\$0.00
SCHOLARSHIPS & FELLOWSHIPS	\$3,000.00	\$12,000.00
EQUIPMENT	\$0.00	\$0.00
OTHERS	\$0.00	\$100.00
<b>TOTAL DIRECT COSTS</b>	<b>\$14,179.39</b>	<b>\$38,029.19</b>
<b>TOTAL INDIRECT COST</b>	<b>\$1,117.97</b>	<b>\$2,602.50</b>
<b>TOTAL COSTS</b>	<b>\$15,297.36</b>	<b>\$40,631.69</b>

**Please Remit Payment within 45 Days of Invoice Date**

I certify to the best of my knowledge that all expenditures reported (or payments requested) are for appropriate purposes and in accordance with the provisions of the application and award document, and that payment is due and has not been previously requested.

ROBERT A. ROBERTS  
Manager, Office of Research Services

Remit To: UNIVERSITY OF HAWAII, OFFICE OF RESEARCH SERVICES, 2440 CAMPUS ROAD, BOX 368, HONOLULU, HI 96822  
Direct Inquiries To: Fernandez, Jessica, jkfern@hawaii.edu, 808-956-5506

If you require additional assistance, please contact the Account Receivable section at [accountsreceivable@ors.hawaii.edu](mailto:accountsreceivable@ors.hawaii.edu)