# 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.

## <u>CHAPTER 343 – ENVIRONMENTAL ASSESSMENT:</u>

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**.

#### **LOCATION:**

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

Tax Map Key	This Board Action	Previously Approved	Owner	State Land Use
(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	it .	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

<sup>\*</sup>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,

CARTY 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

# 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

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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:

LARYY 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 SUZANNE D. CASE CHARRIERSON 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 CONVEY ANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND ECOSTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIEF
HISTORIC PRESERVATION
KAHOOLA WE SLAND RESERVE COMMISSION
LAND
STATE PARKS

### **EXEMPTION NOTIFICATION**

Regarding the preparation of an environmental assessment pursuant to Chapter 343, HRS and Chapter 11-200, HAR

Project Title:	Application for Geothermal Exploration Permit – Hualalai West Rift Zone, Hawaii	
Project Location:	West Rift Zone of Hualalai, Hawaii TMK: (3) 7-3-009:019, 025, 028, (3) 7-3-010:032, 035, 041, (3) 7-4-008:001, 005, 047, 057	
Project Description:	The project consists of non-invasive geophysical investigation for basic data collection.	
Chapter 343 Trigger(s):	Use of State Funds	
Exemption Class & Description:	Exemption Class 5, item 11 of the Department of Land and Natural Resources, as review and concurred upon by the Environmental council on June 5, 2015, that states "Conduct geothermal exploration activity that involves non-invasive geophysical operations for testing and analysis. Activities conducted under this exemption shall comply with all applicable federal, state and county laws, rules, regulations, guidelines and standards. This exemption would not apply in Urban or Conservation land use districts or in sensitive environments."	
Recommendation:	It is anticipated this project will have minimal or no significant effect on the environment and is presumed to be exempt from the preparation of an environmental assessment.	

Suzanne D. Case, Chairperson	Date	

UH Hualalai Exploration Project Map (v2)

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