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DEPARTMENT OF WATER SUPPLY • COUNTY OF HAWAII
25 AUPUNI STREET • HILO, HAWAII 96720
TELEPHONE (808) 969-1421 • FAX (808) 969-6046:52

September 28, 1994

OFFICE OF
QUALITY CONTROL

Mr. Bruce Anderson, Interim Director
State of Hawaii
Office of Environmental Quality Control
220 South King Street, 4th Floor
Honolulu, HI 96813

FINAL ENVIRONMENTAL ASSESSMENT AND NEGATIVE DECLARATION FOR
HALEKII PRODUCTION WELL
TAX MAP KEY 8-1-01:28

The Department of Water Supply (DWS), County of Hawaii, did not receive any comments during the 30-day public comment period which began on August 8, 1994. The DWS has determined that the project will not have significant environmental effect and has issued a negative declaration. The DWS is submitting the final Environmental Assessment and Negative Declaration for the subject project. Please publish this notice in the October 8, 1994 Office of Environmental Quality Control (OEQC) bulletin.

We have enclosed a completed OEQC bulletin and four (4) copies of the Final Environmental Assessment and Negative Declaration.

Please contact Mr. William Atkins if you have any questions.

H. William Sewake, P.E.
Manager

WA

Encs.

... Water brings progress...

130

1994-10-23-HI-*FEA*-Halekii
Production Well

OCT 23 1994

DEPARTMENT OF WATER SUPPLY
COUNTY OF HAWAII
HILO, HAWAII

FINAL ENVIRONMENTAL ASSESSMENT AND NEGATIVE DECLARATION

FOR THE

HALEKII PRODUCTION WELL

DISTRICT OF SOUTH KONA

STATE OF HAWAII

PURSUANT TO CHAPTER 343
HAWAII REVISED STATUTES

SEPTEMBER 15, 1994

DOCUMENT CAPTURED AS RECEIVED

NOTICE OF DETERMINATION: NEGATIVE DECLARATION

**FOR: HALEKII PRODUCTION WELL
HALEKII, SOUTH KONA, HAWAII**

**BY: DEPARTMENT OF WATER SUPPLY
COUNTY OF HAWAII**

This action will have no significant effect on the environment and therefore does not require the preparation of an Environmental Impact Statement. This Notice of Determination, together with the supporting Environmental Assessment, is being filed as a Negative Declaration.

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ENVIRONMENTAL ASSESSMENT
HALEKII PRODUCTION WELL
DEPARTMENT OF WATER SUPPLY
COUNTY OF HAWAII

I. PROJECT DESCRIPTION AND PURPOSE:

The project consists of installing a variable speed deepwell pump that will have an adjustable pumping rate of 900 to 1400 gallons per minute (GPM). A new control building and a chlorination station will be constructed. The pump discharge piping will be arranged and connected to the existing 0.25-mg Halekii Reservoir. Appurtenant electrical and electronic equipment will be installed.

Site improvements will include a new drain sump and site grading to provide a level pad for the pump and control building foundations. New on site A.C. paving will also be provided.

The project site is under the jurisdiction of the County of Hawaii Department of Water Supply (DWS) by Executive Order 2290 (Tax Map Key 8-1-1:28).

Although the site is physically located in South Kona District, it is part of the North Kona Water System and will supplement the sources in North Kona and may relieve some of the load off the sources in South Kona.

Funding for the proposed project is by DWS Funds. The estimated cost is \$1.1 million.

II. PROJECT LOCATION:

The project site (Tax Map Key: 3rd Div. 8-1-1:28 (Portion) is located in the South Kona District of the Island of Hawaii, approximately 760 feet south from the North Kona - South Kona District Boundary and one mile southeast from the intersection of Halekii Street and the Hawaii Belt Road. (Exhibit A).

The land upon which the well is located is owned by DWS. The well site is bordered on its north, west, and south boundaries by undeveloped lands currently zoned agriculture and unplanned by the County Planning Department and zoned agriculture.

The mean annual rainfall of the area is 40 to 60 inches a year.

The Soil Conservation Services' Soil Survey of the Island of Hawaii classified the soil at the project site as belonging to the Punaluu Series, which consists of well-drained, thin organic soils over Pahoehoe Lava

bedrock. Punaluu extremely rocky peat, 6 to 20 percent slopes (r PYD) is described as having rock outcrops occupying 40 to 50 percent of the surface.

The surface layer is black peat about 4 inches thick, and is underlain by Pahoe-hoe Lava bedrock. This soil is medium acid. The soil above the lava is rapidly permeable, while the Pahoe-hoe Lava is very slowly permeable. However, water permeates the lava rapidly through the cracks. Runoff is slow and the erosion hazard is slight. This soil is used for pasture.

According to the Federal Emergency management Agency's Flood Boundary and Floodway Map for Hawaii County, May 1982, the well site and its surrounding areas are located outside of flood boundaries.

III. POTENTIAL IMPACTS AND SIGNIFICANCE:

The project is located in the South Kona District. However, it is part of the North Kona Water System. The purpose of this water source is to supplement the existing water sources in North Kona. South Kona may also benefit from the well's potential by relieving some of the load off the sources in South Kona.

Impacts from the construction phase of this project will be minimal. The on-site construction noise resulting from the site preparation and leveling for the pump pads and building foundation will not extend extensively beyond the property boundaries. The construction of the buildings, settings, and testing equipment will not be a noise nuisance factor. Construction will be during day light hours and work will not be permitted on the weekends or holidays unless approved by the DWS. Noise from construction activities is subject to applicable regulations of the State of Hawaii Department of Health.

Since most construction equipment emit noise in excess of 70 dba (See Exhibit B), the contractor is required to install and maintain mufflers and other noise suppressing devices on his equipment.

Inconvenience to nearby residence will be minimal from the construction activities and noise.

IV. DETERMINATION:

The preceding Environmental Assessment has indicated that this action will have no significant long term adverse impact on the environment. The adverse impacts are of short duration and can be minimized by corrective measures. It is therefore determined that an Environmental Impact Statement is not required and this assessment be filed as a Negative Declaration.

In addition, the Office of Environmental Quality Commission has classified this type of production well under Exemption Class No. 5.

V. REFERENCE:

1. Bulletin 9 - Geology and Groundwater Resources of the Island of Hawaii - H. T. Stearns and G. A. Mac Donald, October 1946.
2. Soil Survey of the Island of Hawaii - U.S. Soil Conservation Service, December 1973.
3. Water Master Plan - Island of Hawaii - Department of Water Supply, December 1980.

CONSTRUCTION EQUIPMENT NOISE RANGES

		NOISE LEVEL (dba) AT 50 FT					
		60	70	80	90	100	110
EQUIPMENT POWERED BY INTERNAL COMBUSTION ENGINES EARTH MOVING	COMPACTERS (ROLLERS)		H				
	FRONT LOADERS		H				
	BACKHOES		H				
	TRACTORS		H				
	SCRAPERS, GRADERS		H				
	PAVERS			H			
	TRUCKS			H			
EQUIPMENT POWERED BY INTERNAL COMBUSTION ENGINES MATERIALS HANDLING	CONCRETE MIXERS		H				
	CONCRETE PUMPS		H				
	CRANES (MOVABLE)		H				
	CRANES (DERRICK)			H			
EQUIPMENT POWERED BY INTERNAL COMBUSTION ENGINES STATIONARY	PUMPS		H				
	GENERATORS		H				
	COMPRESSORS		H				
IMPACT EQUIPMENT	PNEUMATIC WRENCHES			H			
	JACK HAMMERS AND ROCK DRILLS			H			
	PILE DRIVERS (PEAKS)				H		
OTHER	VIBRATOR		H				
	SAWS		H				

Note: Based on Limited Available Data Samples

Source: Noise From Construction Equipment and Operations
Building Equipment, and Home Appliances, EPA, 1971