## **ADDENDUM NO. 3**

COUNTY OF KAUA'I DEPARTMENT OF WATER

INVITATION FOR BIDS For

# JOB NO. 16-04, WP2020 #WKK-03 MCC, CHLORINATION FACILITIES – KĪLAUEA WELLS NO. 1 AND NO. 2 KAUA'I, HAWAI'I

## NOTICE TO PROSPECTIVE BIDDERS

This addendum is hereby made a part of the INVITATION FOR BIDS for the subject project, and it shall amend the said contract documents in the following respects:

### Item 1

Added Section SP-12 "Chemical Testing and Disinfection For Deep Pump and Well Projects".

## End of Addendum No. 3

Should you have further questions, please contact the Procurement Officer at (808) 245-5416 or email <a href="mailto:mhinazumi@kauaiwater.org">mhinazumi@kauaiwater.org</a>.

Joseph Tait (Nov 10, 2021 13:15 HST)

Joseph E. Tait Manager and Chief Engineer November 10, 2021

## ACKNOWLEDGEMENT OF RECEIPT OF ADDENDUM NO. 3

Receipt Acknowledged:		
Organization	Received by	
Date	Title	
(Please	e sign and return this acknowledgement.)	



# SECTION SP-12 – CHEMICAL TESTING AND DISINFECTION FOR DEEP PUMP AND WELL PROJECTS

### 12.01 GENERAL:

This item of work shall include furnishing of all labor, materials, tools and equipment necessary to perform chemical and bacterial testing of the newly installed pumps to meet requirements set forth by the Safe Drinking Water Act (SDWA).

### 12.02 SEQUENCE OF WORK

### A. CHEMICAL ANALYSIS AND CERTIFICATION:

- (1) The Contractor shall notify DOW in writing a minimum of 2 weeks in advance prior to chemical testing and analysis.
- (2) Chemical sampling and analysis may occur prior to chlorination and bacterial testing.
- (3) DOW shall perform chemical sampling and send to a Contract lab for analysis and submit the results to the DOH Safe Drinking Water Branch.
- B. CHLORINATION: Prior to chlorination, a water chlorination and sanitation contractor with a C37-D license shall submit a chlorination plan that includes the water source, injection points, proposed sampling points, and procedure. Refer to the Water Notes in the drawings, the Water Systems Standards as amended, AWWA C651-05, A100-15, and C654-13 for guidance. The chlorination plan shall comply with all discharge standards related to NPDES and local, state, and federal regulations. Chlorination shall not occur until the plan is accepted by DOW.

At a minimum, the chlorination plan shall include the following:

- (1) A calcium hypochlorite and water slurry shall be used to attain a chlorine residual of not less than 50 parts per million (ppm).
- (2) Slurry shall be injected into the casing to avoid affecting nearby wells.
- (3) The well pump shall be surged at least once to prove 50 ppm was attained.
- (4) Chlorinated water shall not be discharged on-site but instead shall be contained for dechlorination. The Contractor is responsible to ensure the chlorinated water has less than 2 ppm chlorine residual prior to discharge and the Contractor is responsible to meet all applicable NPDES permit requirements.
- (5) Contractor to be available to assist DOW throughout water sampling and testing procedures.



### C. WATER SAMPLING FOR PATHOGEN TESTING:

- (1) The Contractor shall notify DOW in writing a minimum of 2 weeks prior to bacterial water sampling.
- (2) Prior to water sampling, the well shall be pumped to waste for a minimum of 15 minutes to prove 0 ppm chlorine residual. The well shall sit idle for no more than 24 hours.
- (3) The Contractor will then take two samples. The second sample shall be taken 22-26 hours after the first sample. The Contractor will send to a Contract lab for analysis and submit the results to the DOW.
- (4) Steps described in Paragraph B.2 and B.3 shall be repeated as necessary until acceptable test results are obtained from two consecutive samples collected over 22-26 hours. Acceptable results shall be a negative result for the presence of coliforms and HPC counts less than 300 CFU/mL.
- D. Upon satisfactory completion of bacterial testing, DOW will conduct pre-final inspection and final inspection. The Contractor shall be present during these inspections to note any deficiencies. The DOW Project Management Section will notify other divisions that final inspection has been completed and that the warranty period for the new equipment has begun.
- E. Upon receipt of DOH-Safe Drinking Water Branch certification of the well, DOW shall schedule the an operational/efficiency test of the new equipment. The Contractor shall operate the new pump equipment and place the facility into service. The Contractor shall repair any equipment defects that occur during the operational testing.
- F. Water systems must be brought online within 14 calendar days of the first bacterial sample. If water systems are not brought online within 14 calendar days due to a defect in the equipment, another bacterial analysis shall be conducted at the Contractor's expense. The Contractor shall collect the sample and send it to a certified laboratory for analysis.

### 12.03 PAYMENT

Payment for testing and shall be made at the respective Unit Price Bids for the various items or the Lump Sum Bid, whichever is specified in the proposal. Payment shall represent full compensation for furnishing all labor, tools equipment, materials and incidentals necessary to complete the testing in place complete, in accordance with the plans and specs.

\*\*\*END OF SECTION\*\*\*

