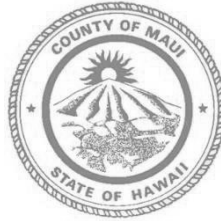


MICHAEL P. VICTORINO
Mayor

JEFFREY T. PEARSON, P.E.
Director

HELENE KAU
Deputy Director



DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793

May 25, 2021

Ms. Joanna Seto, P.E., Environmental Health Program Administrator
Department of Health - Safe Drinking Water Branch
State of Hawaii
Email: joanna.seto@doh.hawaii.gov

Dear Ms. Seto:

SUBJECT: POOKELA WELL "B" DEVELOPMENT
AIS WAIVER REQUEST

Please accept this correspondence as a formal request from the County of Maui Department of Water Supply (DWS) for a product-specific availability waiver for the American Iron & Steel (AIS) requirement. We are requesting the waiver for the discharge column piping that will be used/installed as part of the Pookela Well "B" Development project in Makawao, Maui, Hawaii.

In accordance with the United States Environmental Protection Agency's (USEPA) requirements for a waiver request, please refer to the following details of the Pookela Well "B" Development project:

- Development of a back-up well to provide water source reliability for the upcountry Maui area, which encompasses the areas of Makawao, Pukalani, Haiku, and Kula. This new well project includes installation of a 900 gallons per minute (gpm) capable pump and motor, column and discharge piping, flush water drainline, and motor control center upgrades.
- The project is financed by DOH Safe Drinking Water Branch's State Revolving Loan Fund (DWSRF) program. The Consolidated Appropriations Act of 2014 includes an American Iron & Steel (AIS) provision, which requires recipients of DWSRF assistance to utilize iron and steel products produced in the United States.

- The project's general contractor, Alpha, Inc., made many attempts to secure AIS compliant discharge column piping from multiple suppliers as follows: LB Foster, Flowserve, Kelly Pipe, US Steel, and Roscoe Moss. These discussions confirmed that the AIS compliant specified steel discharge column piping is not available in the necessary quantities to meet the needs of this project. Please refer to **Attachment 1**.

The discharge column pipe is required to comply with Section 15131 (Addendum No. 5) of the project specifications as noted below. The discharge column pipe specifications are based on design calculations incorporating the weight of the pump and motor, water in the column piping, and the weight of the column pipe, as well as the depth of the well (1950 ft) and an industry standard safety factor. Please refer to **Attachment 2** for a copy of the applicable portion of the specifications.

4. *Discharge Column Assembly:*

- a. *Discharge column pipe:* *API Grade J55,
API Grade K55 couplings*
- b. *Pipe nominal dia.: 10 inches (10.75 inches OD)*
- c. *Pipe wall thickness: 0.4 inches minimum*
- d. *Pipe column connection: API long thread*

The project engineer of record, Andrew Amuro, has confirmed that a pipe wall thickness for the discharge column pipe of 0.365 minimum will be acceptable, should 0.4 inch piping not be available. Please refer to **Attachment 3** for a copy of the email from the project engineer of record.

Therefore, we are requesting an AIS waiver to purchase discharge column pipe material from a non-domestic source that meet API Grade of J55 for the pipe, with pipe wall thickness ranging from 0.365 to 0.4 inches minimum, and API Grade K55 for the couplings in the following quantities:

- 90 (ea): J55 Pipe (20-foot sections) and K55 Couplings
- 10 (ea): J55 Pipe (10-foot sections) and K55 Couplings

Please note that this project is currently in progress and, according to the project schedule, the contractor is ready to order and install the discharge column piping immediately. In addition, the 900 gpm pump has already been placed on order and is

Ms. Joanna Seto, P.E.
DOH-SDWB
May 25, 2021
Page 3 of 3

scheduled to be delivered to Maui in early June 2021. Per the manufacturer's recommendations, long-term storage of the pump, exceeding six months, may be detrimental to its internal components. The target project completion date has been extended by one year to June 2022 to address the request for AIS waiver.

Furthermore, the project's bid was [REDACTED], with the material cost of the column piping being in excess of [REDACTED].

Should you need any additional details regarding this request, please contact the contractor's (ALPHA, Inc.) project manager, Marco A. Topete, at (808) 344-3490 or at mtopete@alphahawaii.com, or the Department of Water Supply's project engineer, Tom Ochwat, at (808) 270-7553 or at thomas.ocwhat@co.maui.hi.us.

Sincerely,

 Jeffrey T. Pearson
2021 05 28 10:16:17
-10'00'

JEFFREY T. PEARSON, P.E.
Director

MT/to

Attach.: **Attachment 1 - Summary Correspondence with Industry Partners and Suppliers**
Project Specifications Section 15131– Pg. 9 - Column Piping Specification

cc: Joan Corrigan, Hawaii Dept. of Health, via email (joan.corrigan@doh.hawaii.gov)

This waiver request was submitted to the EPA by the state of Hawaii. All supporting correspondence and/or documentation from contractors, suppliers or manufacturers included as a part of this waiver request was done so by the recipient to provide an appropriate level of detail and context for the submission. There may be documents with project diagrams, schedules, and supplier correspondence in formats that do not meet the Federal accessibility requirements for publication on the Agency's website. Hence, these exhibits have been omitted from this waiver publication. They are available upon request by emailing DWSRFWaiver@epa.gov.



1695 Verdi Vista Court
Reno, Nv. 125

Cell Phone: 02-498-2970

March 31, 2021

Project: Pookela Well
Flowserve Order No. SS00788

Customer: APSCO LLC

Dear Mr. Shawn Clark,

After an extensive search to find AIS compliance column pipe we have exhausted all known avenues.

We have gone to the recommended suppliers as provided by the EPA and all manufacturers have declined to provide a quotation or have stated they cannot comply with the requirements.

Please see the below listing with the comments.

At this point we have very limited options. We plan on supply pipe that meets the requirements of specification but does not have the AIS compliance.

J55 (or stronger ie. K55) API Pipe with API 8 RD short threads.

Column pipe will be galvanized

K55 Couplings

10.75" OD with .4"+ wall thickness. (Or as required to handle the pressure, seems that 0.365 will also work)

Capable of handling max shutoff pressure ~1100PSI.

Please confirm that we are able to proceed on this basis.

Should you have any questions please feel free to contact the writer.

Thanks and BE SAFE,

Gary Sacchetti/sc_ltr_00
West Coast Sales Engineer

4. Discharge Column Assembly:

a. Discharge column pipe: API Grade J55,
API Grade K55 couplings

b. Pipe nominal dia.: 10 inches (10.75 inches OD)

c. Pipe wall thickness: 0.4 inches minimum

d. Pipe column connection: API long thread

5. Discharge Elbow:

a. Material: API Grade K55

b. Diameter: 10 inches

c. Discharge flange pipe size: 10 inches

d. Pipe flange class: ANSI B16.5, 150 lb. flat face to
mate with B16.1 ductile iron flat
face fitting

6. Motor:

a. Number required: One (1)

b. Base diameter: 16.125 inches

c. Motor HP rating: 600 HP

d. Motor service factor: 1.1

e. Min. full load motor
efficiency: 89% \pm 1%

f. Power: 3 phase, 60 hertz, 4160 volts

g. Max. motor speed: 1800 RPM

h. Min. motor power factor: 83 percent

i. Min. pump cable size #2/0