





STATE OF HAWAII  
DEPARTMENT OF HEALTH  
KA 'OIHANA OLAKINO  
SAFE DRINKING WATER BRANCH  
ULUAKUPU BUILDING 4  
2385 WAIMANO HOME ROAD, SUITE 110  
PEARL CITY, HI 96782-1400

In reply, please refer to:  
File: SDWB

BABA01.docx

May 14, 2024

US EPA BABA Waiver Office  
[via [BABA-OW@epa.gov](mailto:BABA-OW@epa.gov) only]

Dear BABA Compliance Waiver Team:

SUBJECT: BUILD AMERICA, BUY AMERICA, (BABA) WAIVER REQUEST - PROJECT-SPECIFIC NONAVAILABILITY WAIVER OF BABA REQUIREMENTS TO HAWAII DEPT OF WATER SUPPLY, KAHALUU SHAFT PUMP REPAIR, JOB NO. 2021-1172

The Department of Health (DOH), Drinking Water State Revolving Fund (DWSRF) hereby applies for a BABA waiver for "the radial guided ring disc type nozzle check valves" as part of phased Kahaluu Shaft Pump Discharge Piping Repair projects.

The repair will be funded by an equivalency loan and is therefore subject to BABA compliant materials:

- **Waiver Type:** Nonavailability of a domestic product in sufficient and reasonably available quantities or of a satisfactory quality.
- **Waiver Level and Scope:** Project-level waiver for a single product type for a single project within one award.
- **Product:** Four (4) 12" ASTM A351 Gr. CF8M radial guided ring disc nozzle check valves, pickled and passivated per ASTM A380 & A967. See **Enclosure 1** for specifications.
- **Estimated cost:** Estimated cost per check valve is [REDACTED] in November 2023.
- **Project Summary:** Kahalu'u Shaft Pump Repair. In its Kahaluu Shaft, the Hawaii Department of Water Supply (HDWS) maintains four (4) pumps for redundancy and peak production. Scope of labor contract will involve the replacement of the pumping assembly for Pump #2, including replacement of the pump pad and the discharge piping. It will include the furnishing of the pumping assemblies for all four (4) pumps, but labor for installation of just Pump #2. The material bid was specifically for the discharge piping mostly for Pump #2; however, certain materials will be purchased for all four (4) pumps, allowing HDWS better management of the BABA related compliance requirements for these materials. Space is limited and expansion is not able to occur within the historic tunnel. Project specifications include component and material standardization for replacement flexibility.
- **Recipient's UEI:** Is EPPEQ6N7ZH13 (Dept of Water, County of Hawaii); HDOH's UEI is LFFVLBD6XZB5.


- **Project cost:** Of current material bid and labor is estimated at \$1.17M. Material bid will be separate from the contractor bid to maintain better control over BABA-compliance.
- **Project Timeline:** The material component of this project went out for bid in early 2024 and bid were opened on March 7, 2024, see **Enclosure 2**, minutes, page 10-13. Many of the specifications did not receive any bids and the HDWS staff are working through an alternative procurement process, to find and procure BABA-complaint materials. In addition to the delay that has occurred due to lack of available BABA-compliance materials, the shipping to Hawaii via barge often adds another 4-6 weeks. This project is expected to be funded by an DWSRF loan; no other federal financial assistance has been awarded to date. Project currently delayed until waiver received to verify costs are eligible for reimbursement by the DWSRF loan. Once procurement completed and bid with contractor awarded, the repair is estimated for 150 calendar day completion upon Notice To Proceed (NTP).

An informal market review was initiated and completed for many of the products needed for this project:

- **Market Findings:** The EPA conducted market research in March/April 2024. Domestic manufacturers for several components were presented to the HDWS via email on Friday 4/19/24. See **Enclosure 3** for more details.
- **Manufacturer Confirmation:** Check valve does not meet BABA. See **Enclosure 4** for email.
- **Domestic Product Review:** HDWS reviewed, domestic manufacturers, (DFT, Inc.) that supposedly had alternates to the manufacturer and model of valve specified, however, in reviewing their offerings, it was just a standard silent globe check valve with high friction losses. Additionally, the valve would not fit in the very limited space available in the discharge piping arrangement. See **Enclosure 5**
- **Waiver requested:** HDWS asked HDOD to pursue a waiver on 4/22/24.

If there are any questions, please contact Ms. Joan Corrigan, Supervisor of the SDWB Engineering Section, at (808) 586-4258 or [Joan.Corrigan@doh.hawaii.gov](mailto:Joan.Corrigan@doh.hawaii.gov) or Ms. Judy Hayducsko, DWSRF Engineer at (808) 586-4267 or [Judy.Hayducsko@doh.hawaii.gov](mailto:Judy.Hayducsko@doh.hawaii.gov).

Sincerely,



GAUDENCIO C. LOPEZ, P.E., CHIEF  
Safe Drinking Water Branch

JH:cw

Enclosures

1. Specifications
2. 3/19/24 HDWS Board Minutes
3. 4/19/24 USEPA Market Research email
4. 2/23/24 Email from Manufacturer's Distributor on the ability to provide BABA compliant materials.
5. 4/26/24 Email from HDWS explaining why domestic manufacturer check valve will not be acceptable.



"This waiver request was submitted to the EPA by the state of Hawaii and applies only to the project in the subject line. 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](mailto:DWSRFWaiver@epa.gov)."

3. Material Specifications for Solenoid Control.

- |                       |   |
|-----------------------|---|
| a. Pressure Rating:   | 400 psi                                   |
| b. Body:              | 316 Stainless Steel                       |
| c. Trim:              | Stainless Steel, ASTM A276 Gr. 316        |
| d. Mounting Bracket:  | Stainless Steel, ASTM A276 Gr. 316        |
| e. Guide:             | Stainless Steel, ASTM A276 Gr. 316        |
| f. Hex Standoffs:     | Stainless Steel, ASTM F593 Gr. 316        |
| g. Tubing & Fittings: | Stainless Steel, ASTM A269 & A403 Gr. 316 |
| h. Voltage & Hertz:   | 120 VAC, 60 Hz                            |
| i. Operating Fluid:   | Water                                     |

**205.08 – NOZZLE CHECK VALVES.**

ADD the following section.

**A. General.**

1. The check valve shall be nozzle type of non-slam, low pressure loss and no maintenance in design.
2. The valve disc ring shall be spring-loaded guided friction-free by three (3) or more radial guides to give two aerodynamic flow patterns when fluid passes through the valve creating a low-pressure loss.
3. The non-slam characteristic shall be achieved by the valve reacting quickly to flow changes that always outpace the process change.
4. The sealing shall be metal to metal and drop tight. No external dampening devices shall be used for the valve.
5. The valve shall be designed for long service life with no soft parts to wear.
6. The valves shall be full open with a flow velocity of 3.68 ft/s (1.12 m/s).

**B. Products.**

1. Approvals and Certifications
  - a. All products in contact with water or chemicals injected into the water shall be certified to comply with NSF-61 by an accredited testing laboratory.
2. Manufacturers
  - a. Subject to compliance with these specifications, the manufacturers below are acceptable.
    - i. Noreva NB Series
  - b. Acceptance of alternative manufacturers shall be at the sole discretion of the Project Engineer and based on the Project Engineer's sole opinion of equivalency to the specified products in terms of specific design and general quality and suitability for the intended application.

3. Materials

a. Body:

- i. Stainless Steel, ASTM A351 Gr. CF8M (Pickled & Passivated per ASTM A380 and A967)

b. Valve Seat:

- i. Stainless Steel, ASTM A351 Gr. CF8M (Pickled & Passivated per ASTM A380 and A967)

c. Ring Disc:

- i. Stainless Steel, ASTM A351 Gr. CF8M (Pickled & Passivated per ASTM A380 and A967)

d. Radial Guide:

- i. Stainless Steel, AISI 316

e. Springs:

- i. Stainless Steel, AISI 316

f. Diffuser:

- i. Stainless Steel, ASTM A351 Gr. CF8M (Pickled & Passivated per ASTM A380 and A967)

g. Bolts and Hardware:

- i. 316 Stainless Steel, ASTM A193 Gr. B8M

4. Valve Testing

a. All check valves shall be hydrostatically tested to API 589 as follows:

i. Body Test:

- a) The hydrostatic test shall be performed at 1.5 times the rated pressure of the valve.
- b) No visible leakage from inside to outside is allowed.

ii. Disc Strength and Seat Test:

- a) Test to be carried out with water. This test shall be performed at 1.1 times the rated pressure of the valve. Test pressure shall be applied behind the disc. The acceptable leakage rate is accordance with API 598.
- b) Duration of maintaining the valve under test pressure shall be not less than 5 minutes.