

February 27, 2025

To: United States Environmental Protection Agency

Re: AIS Waiver Request for 24" Insertion Valve  
St. Bernard Parish, Louisiana

Project: Louisiana Department of Health  
2019 Drinking Water Infrastructure Improvement Project  
Drinking Water Revolving Loan Fund Project No.: 1087001-03  
High Service Water Pump Project 3.2, Contract 14  
Louisiana Permit No.: 23-01-087-102

To Whom It May Concern,

On behalf of the St. Bernard Parish Water System, we are hereby submitting an AIS waiver request for the purchase and installation of two 24-Inch Insertion Valves.

St. Bernard Parish is preparing to install a new high service water distribution pump with associated piping and valves into the active water system. The entire Water Treatment Plant and water distribution system must stay active during all phases of construction to supply potable water to the residents of St. Bernard Parish. The 24-Inch Insertion Valve is designed to be installed on an active, pressurized pipe without interruption of flow. With this construction taking place in the active water plant, the 24-Inch Insertion Valve is necessary to install in two locations for the purpose of maintaining potable water flow during installation. Other valves (such as standard gate valves) would require a stoppage of potable water flow to allow a cut-in installation. These 24-Inch Insertion Valves will remain as permanent features in the water piping system and will allow for future system operation.

St. Bernard Parish, along with their program manager and contractor, have completed research to locate a domestic manufacturer of 24-Inch Insertion Valves. After contacting several manufacturers and suppliers, only two companies were found to manufacture 24-Inch Insertion Valves. Neither of the two manufacturers produce the 24-Inch Insertion Vales domestically.

**List of Manufacturers Contacted for the Supply of 24-Inch Insertion Valves:**

██████████ manufactures the 24-Inch ██████████, which meets the project needs and specifications. This valve does not meet AIS requirements.

██████████ manufactures the 24-Inch Insertion ██████████. This valve does not entirely meet the project specifications. This valve does not meet AIS requirements.

██████████ - Does not manufacture 24-Inch Insertion Valves. ██████████ only manufactures up to 12-Inch Insertion Valves.

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# digital engineering

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For the above stated reasons, St. Bernard Parish is requesting to obtain an AIS waiver for the purchase and installation of the following product:

Product Description: **Insertion Valve**

Product Name: **24" -Valve**

Quantity: **Two (2)**

Location of Installation: **St. Bernard Parish Water Department**  
**1111 East St. Bernard Highway**  
**Chalmette, LA 70043**

See the attached product specification and letter .

Sincerely,



Neal Belmonte

Program Manager

Digital Engineering & Imaging, Inc. (on behalf of St. Bernard Parish, Louisiana)

This waiver request was submitted to the EPA by the state of Louisiana 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).

5. Insertion Valve
- a. Traditional line tapping methods shall be used for the installation of all insertion valves to allow the removal of a single coupon for system evaluation. Reaming the pipe, complete removal of a section of pipe (top and bottom), or milling a slot in the pipe shall be prohibited.
  - b. All insertion valves must be installed by trained and authorized personnel in accordance with valve manufacturer recommendations.
  - c. The valve interior and exterior surfaces shall be coated in accordance with the latest revisions of AWWA C504 and must be NSF 61 Certified.
  - d. All insertion valves must be capable of working on cast/grey iron or ductile iron Class A, B, C, and D, diameters without altering or changing out either top or bottom portion of split valve body or using any type of transition gasket.
  - e. All insertion valves must provide a solid support of the host pipe through the entire laying length of the valve body.
  - f. All insertion valves shall be rated for 150 psi working pressure and shall be bi-directional.
  - g. All insertion valves must be hydrostatically pressure tested to 1.25 times of the system operating pressure (minimum) or 1.5 times of the insertion valve rated pressure.
  - h. The test shall be sustained for a minimum of 15 minutes. Once the pressure test is affectively achieved the insertion valve body must not be moved in accordance with AWWA Standards. If the insertion valve body is moved the pressure test must be completed again. Any movement, repositioning, loosening and/or re-tightening must be retested before the pipe is tapped.
  - i. Insertion valves shall have a molded resilient wedge seal. The resilient wedge seal will be affixed into the ductile iron valve cartridge. The valve seat shall implement an actuated spreading mechanism to assure a low operating torque, positive seal, and eliminate the need of an external valve bypass.
  - j. The expanding valve cartridge shall be engineered to achieve a positive seal on the interior of a clean or tuberculated host pipe.

- k. Pressure equalization on the down or upstream side of the closed wedge shall not be necessary to open the valve.
  - l. The wedge shall be symmetrical and seal equally well with flow in either direction.
  - m. The resilient wedge must maintain wedge alignment throughout its travel and achieve maximum fluid control regardless of high or low flow pressure or velocity.
  - n. Insertion valves shall have a full-size, full-port flow way unobstructed and free of depressions to provide optimum flow and sealing and not trap tuberculation or debris.
  - o. Maximum height of the valve from the center of the host pipe to the top of the operating nut shall not exceed the following dimensions: 24" valve = 61".
  - p. Maximum laying length of the valve body shall not exceed the following dimensions: 24" valve = 39.5"
  - q. Maximum weight of the valve shall not exceed the following weight: 24" valve = 3150 lbs.
  - r. The ID range for the 24-inch insertion valve is 24.00"-24.89". The OD range for the 24-inch insertion valve is 25.65"-26.47"
  - s. Insertion valves shall be NRS (non-rising stem). Insertion valves shall be operated by a 2" square wrench nut — open left (black) or open right (red).
  - t. The gate valve stem shall be made of stainless steel.
  - u. The NRS stem must have an integral stem collar. Two-piece stem collars are not acceptable. The stem shall be affixed into the valve cartridge spreading mechanism to maintain stem alignment, low torque, and continuous operation of the valve.
  - v. All bonnet and valve body fastener hardware shall be stainless steel. Valve cartridge locking pins shall be made of stainless steel.
  - w. Insertion valves that require the use of point loading fasteners are prohibited. The use of split restraint devices may be used as an option.
  - x. All moving and operating parts must be removable, repairable, and/or replaceable under pressure to ensure easy repair of broken or damaged parts.
  - y. All insertion valves shall be ductile iron body composition with fusion bonded epoxy coating.
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## PART 4 - EXECUTION

### 4.01 INSTALLATION

- A. All valves and appurtenances shall be installed in the locations shown, true to alignment and rigidly supported. Any damage to the above items shall be repaired to the satisfaction of the Engineer before they are installed.