



Ryan Eldredge  
Engineering Associate  
Municipal Programs-Bureau of Water  
Kansas Department of Health and Environment  
1000 SW Jackson, Suite 420  
Topeka, KS 66612

November 14, 2019

Re: Availability Waiver Request for Fernco Flexible Tap Saddle Models with Tap Saddle Pressure Kit

Dear Mr. Ryan Eldredge:

The City of Emporia, Kansas Downtown Sanitary Sewer System Improvements Project includes rehabilitation of 250 service taps. These taps include inline service taps that will be repaired within a point repair, priority 2 isolated service taps (P2) which require excavation for repair before CIPP liner is installed, priority 1 isolated service taps (P1) which will be repaired by excavation after the CIPP liner is installed. (C) stand for cutout after the liner is installed in the sewer main. These service taps would be taps that were repaired in point repairs before the liner was installed or taps that don't require any repairs. (T) stands trim and means that these service taps are intruding, and need trimmed remotely before the liner is installed. (A) stands for an abandoned service tap and to line past thus sealing inactive service taps from the main. We are anticipating that we will use 250 of the Fernco Flexible Tap Saddle with Tap Saddle Pressure Kit depending on how many taps are determined inactive during construction. The Fernco Flexible Tap Saddle with Tap Saddle Pressure Kit is a flexible connection saddle that includes an additional kit for bentonite tape and reinforcing bars that provides a water tight connection to existing sewer mains including Fold and Form Liner or CIPP Liner. This product is unique because it is flexible enough to adapt to deformed shapes of existing pipe liner and is large enough to cover factory cutouts from inside the sewer main. It also includes bentonite sealing tape that swells when comes into to contact with groundwater providing a water tight connection at the main. One of the main priorities of this project is to reduce/eliminate groundwater infiltration. Excess infiltration in a sanitary sewer system can cause excessive run time and wear on lift station pumps, decrease treatment time at the WWTF, and sanitary sewer overflows. The Fernco Tap Saddle will be used to provide a water tight seal at all the isolated service tap connections for the City of Emporia, KS.

Based on our past experiences and research with the plastic PVC saddles, we have had a difficult time getting a water tight connection on lined pipe that has had deformities from the host pipe or from overcut services after the lining process. The plans currently specify using a GPK PVC saddle with gasket and incorporating a hydrophilic O-ring with the gasket or an approved equal.

BG Consultants, Inc. has done research and found the Fernco Flexible Tap Saddle with Tap Saddle Pressure Kit is a superior product to the currently specified GPK saddle based on the following conditions:

- Flexibility and coverage to better conform to irregular pipe shapes
- Bentonite tape with reinforcing bars for water tight connection
- Ease of field installation

We are requesting an availability waiver for the Fernco Flexible Tap Saddle with Tap Saddle Pressure Kit under the American Iron and Steel Certification Act as we have not found a domestic equivalent. Attached are specifications, relevant plan sheets, manufacture information, contractor and supplier documentation, and other related items. Please let us know if you need any additional information for this waiver request.

Sincerely,



Craig Ronnebaum  
Intern Engineer

**Product Specifications included in "Relevant Plan Sheets" document, as follows:**

**"RELOCATE TAP CONNECTION POINT 2' AWAY FROM ORIGINAL TAP CONNECTION POINT, BREAK AWAY CLAY SEWER MAIN, AND INSTALL A SHORT PVC GASKETED SADDLE TAP GPK PART NO. 136-0084 WITH HYDROPHILIC ROPE AND STAINLESS STEEL STRAPS OR INSERT A TEE (10" DIAM. PIPE AND LARGER ONLY) DIRECTLY TO CIPP OR FOLD & FORM LINER. 2.2. OPTION B: MAINTAIN EXISTING TAP CONNECTION LOCATION AND INSTALL A LONG PVC GASKETED SADDLE GPK PART NO. 136-L084 WITH HYDROPHILIC ROPE AND TWO STAINLESS STEEL BANDS DIRECTLY TO THE DEFORMED CIPP OF FOLD & FORM LINER."**

**This Waiver request was submitted to the EPA by the state of Kansas. All supporting documentation from contractors, suppliers or manufacturers included as 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 and 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. If you need these documents, they are available upon request by emailing [CWSRFWaiver@epa.gov](mailto:CWSRFWaiver@epa.gov).**