

ECS Sprinkler System Pipe Corrosion Analysis involves sectioning and media blasting the fire sprinkler system pipe sample to allow for visual inspection of the piping component. The Engineered Corrosion Solutions Interpretation and Analysis Report presents a description of the characteristics of the metal loss, evaluation, and measurements of any pitting that has occurred and the most likely cause for the metal loss and failure (if present).

Procedure For Pipe Sample Collection and Sample Preparation

- Step 1** If pinhole leak is present on fire sprinkler piping, locate and **mark** pinhole leak/failure with a grease pencil or indelible ink marker.
- Step 2** Before removal of piping section, indicate the pipe sample's orientation by marking "TOP" at the 12 o'clock position of the pipe.
- Step 3** Remove an approximately 12 to 18 inch section of fire sprinkler pipe with pinhole leak/failure located in the middle of the pipe section.
- OR**
If no pinhole leak/failure is present, remove approximately 12 to 18 inch section of fire sprinkler pipe which exhibits the most corrosion damage.
- Step 4** Allow liquid to drain from pipe sample.
- Step 5** Wrap both ends of the pipe sample with plastic and seal with tape or rubber-band to preserve sediment.
EXTERNAL CORROSION – place individual sample into a plastic bag or container to avoid contamination from outside sources (i.e. other pipe samples)
- Step 6** Place Pipe Sample in Shipping Container.
- Step 7** Complete one **Pipe Sample Information Form** for each pipe sample, clearly identifying the sample, and place the form with the sample in the shipping container. Provide as much of the information as available.
- Step 8** Ship Pipe Sample and Pipe Sample Information Form to:

Engineered Corrosion Solutions
Attn: ECS Consulting Group
11336 Lackland Road
Saint Louis, MO 63146
+1 314.432.1377

Customer Information:

Contact Name: _____ Company: _____
Address: _____ City: _____ State: _____
Zip: _____ Phone: _____ PO#: _____
Email: _____

Sample Location:

Facility: _____ Address: _____

System Information (check one): Dry Pipe Preaction Dry Pipe Wet Pipe Supply

Dry or Preaction Air Supply (check one): Air Compressor Nitrogen Generator Other _____

Wet Pipe Water Source (check one):

Municipal (City) Water Water Well Pond or Lake Water Storage Tank

Approx. Age of System: _____ years

Pipe Sample Information:

Date Collected: _____

Location (check one): Riser Main Branch Line Other _____

Pipe Diameter (inches): _____

Pipe Schedule (check one): Schedule 40 Schedule 10 Schedule 5/7 _____

Pipe Orientation (check one): Horizontal Vertical

System Operation Pressure:

Wet System: Water Pressure _____ psi

Dry/Preaction System: Water Pressure _____ psi Maintenance Gas Pressure _____ psi

System Leak History: (e.g. recent leaks when and where, number of leaks) _____

Send Sample To:

**Engineered Corrosion Solutions
Attn: ECS Consulting Group
11336 Lackland Road
Saint Louis, MO 63146**

Check Box to have Sample Returned

**For pipe samples shipped outside the U.S., additional shipping charges may apply.*

Ship To*: _____

