Hydraulic Grade Lines and Water Pressure

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7:00-8:00 am

Training Description:

The hydraulic grade line (HGL) model is a simplified model of how a gravity-fed system works and a unique method for explaining water pressure and pressure zones throughout a distribution system. This demonstration shows examples of a hydraulic grade line during static cases and when water is moving, and describes how to calculate water pressure based on the hydraulic grade line.

Training Agenda:

Operational Analysis - Introduction & What We Do (5 minutes)

Why is pressure important? (5 minutes)

Hydraulic Gradeline Model (HGL) Demonstration - Static Cases (30 minutes)

- Show static cases in the HGL model
- Perform calculations to estimate pressure based on HGL and elevation
- Explanation of regulated pressure zones
- Perform calculations to connect new service line with appropriate pressure
- Observe calculations to determine change in pressure due to source change

Hydraulic Gradeline Model (HGL) Demonstration - Dynamic Cases (20 minutes)

- Show dynamic cases in the HGL model
- Observe calculations to maintain service pressure during flow conditions

Bonus Content (10 minutes)