

Management of Low Pressure in Distribution Systems (EL321)
AWWA Self-paced eLearning Course

Description & Learning Objectives

Course Title:

Low Pressure Transients in a Distribution System

Course Learning Objectives:

As a result of this eLearning course, you will:

1. **Explain** how pressure transients occur.
2. **Describe** the dangers of negative transients.
3. **Demonstrate** how to optimize a pressure management plan.
4. **Identify** distribution system O&M practices.

Long Description:

To protect the distribution system, utilities focus on controlling cross-connections, maintaining a positive pressure, minimizing leaks, ensuring proper distribution system maintenance and flushing, maintaining an effective disinfectant residual, and other measures. However, a variety of normal water distribution system operations can result in pressure fluctuations that can possibly lead to the occurrence of low or negative pressures at various locations in the system.

This course covers pressure transients, what they are, and how to optimize pressure management. Learners will then review pressure improvement plans, transient modeling processes, document tracking methods, and distribution system O&M. Throughout the course, learners will be tasked with making applications to their own system.

Short Description (1 sentence):

Management of Low Pressure describes the fundamentals of low pressure, information on what can cause pressure loss, how to monitor distribution systems for pressure loss, and best practices for managing pressure, and Operation and Management (O&M) practices to mitigate pressure transients.

Blurb (10-15 words – to be used on the website to provide a quick preview):

This course describes pressure in water distribution systems under transient conditions and depressurization for extended periods.

Author Biography:

American Water Works Association collaborates with industry experts and peers to develop all self-paced courses. Self-paced courses are delivered exclusively online, and progress is driven solely by the student. This format allows the student to move through course content at their own pace, taking into consideration the individual's knowledge level and capacity.

Self-paced courses can be completed anytime during a 90-day period after registration. These courses may include presentations, pre-recorded audio, supporting articles, online learning activities, videos, quizzes and evaluations.