

**SECTION 12 WATER SUPPLIES - 12 HOURS****BASIC - 2 Hours**

- 12-01.01 Trainee shall identify the water distribution system, and other alternate water sources in the area of responsibility.
- 12-01.02 Trainee shall identify the following parts of a water distribution system:
- A. distributors
  - B. primary feeders
  - C. secondary feeders
- 12-01.03 Trainee shall identify a:
- A. dry-barrel hydrant
  - B. wet-barrel hydrant
- 12-01.04 Trainee shall identify the following:
- A. normal operating pressure of a water distribution system
  - B. residual pressure of a water distribution system
  - C. the flow pressure from an opening that is flowing water
- 12-01.05 Trainee shall demonstrate hydrant to pumper hose connections for forward and reverse hose lays.

**INTERMEDIATE - 4 Hours**

- 12-02.01 Trainee shall identify the following types of water main valves:
- A. indicating
  - B. non-indicating
  - C. post indicators
  - D. outside screw and yoke
- 12-02.02 Trainee shall identify hydrant usability by:
- A. obstruction to use of hydrant
  - B. direction of hydrant outlets to suitability of use
  - C. mechanical aboveground damage
  - D. condition of paint for rust and corrosion
  - E. the flow by fully operating the hydrant
  - F. the ability to drain
- 12-02.03 Trainee shall define, explain, and demonstrate where applicable, the use of a rural dry fire hydrant system and static water supply source.
- 12-02.04 Trainee shall define a tanker shuttle.
- 12-02.05 Trainee shall identify the apparatus, equipment, and appliances required to provide water at rural locations by relay pumping, large diameter hose, or a tanker shuttle.
- 12-02.06 Trainee shall demonstrate deployment of a portable water tank.

**ADVANCED - 6 Hours**

- 12-03.01 Trainee shall identify and explain the four (4) fundamental components of a modern water system.
- 12-03.02 Trainee, given a pitot tube and gauge, shall use, read, and record several flow pressures.
- 12-03.03 Trainee, given a chart, size of openings, and flow pressures, shall determine the quantity of water flowing from the openings.
- 12-03.04 Trainee, given a chart, shall identify the approximate discharge capacities of various water pipe sizes.
- 12-03.05 Trainee shall identify the pipe sizes used in water distribution systems for residential, business, and industrial districts.
- 12-03.06 Trainee shall identify two (2) causes of increased resistance or friction loss in water mains.