



# **DRIVER/OPERATOR – PUMPER / MOBILE WATER SUPPLY**

## ***Course Description:***

This course is designed to educate Driver/Operators who are responsible for operating apparatus equipped with fire pumps. This apparatus includes pumpers, initial fire attack apparatus, tenders (tankers), wildland fire apparatus, and aerial apparatus equipped with fire pumps. This course presents general principles of pump operation, with application of those principles wherever feasible. This course includes an overview of the qualities and skills needed by the pumper/operator, safe driving techniques, types of pumping apparatus, positioning apparatus to maximize efficiency and water supply, fire pump theory and operation, hydraulic calculations, water supply considerations, relay pumping principles, water shuttle procedures, foam system operation, and apparatus maintenance and testing.

***Textbook:*** Pumping Apparatus Driver/Operator Handbook, 1<sup>st</sup> Edition

***Class length:*** 16 hours

Lesson 1 – The Driver/Operator

Lesson 2 – Types of Fire Apparatus Equipped with a Fire Pump

Lesson 3 – Introduction to Apparatus Inspection and Maintenance

Lesson 4 – Operating Emergency Vehicles

Lesson 5 – Positioning Apparatus

Lesson 6 – What is Water and Where Does it Come From

Lesson 7 – Fire Hose Nozzles and Flow Charts

Lesson 8a – Theoretical Pressure Calculations (U.S.)

Lesson 8b – Theoretical Pressure Calculations (Metric)

Lesson 9 – Fireground Hydraulic Calculations

Lesson 10 – Fire Pump Theory

Lesson 11 – Operating Fire Pumps

Lesson 12 – Static Water Supply Sources

Lesson 13 – Relay Pumping Operations

Lesson 14 – Water Shuttle Operations

Lesson 15 – Foam Equipment and Systems

Lesson 16 – Apparatus Testing