

# Pump Station Operation & Maintenance Workshop

## Training-In-A-Box

This workshop provides an introduction into the requirements for operating and maintain water and wastewater pump stations. It introduces the need for checklists and record keeping, consistency of personnel and methodology, how to select pumps and emergency generators, and current trends in control, telemetry, and O&M manuals.

### Workshop Outline:

- Pump Station Design & Pump Curves
  - Good practice for pump station design
  - Flow and head requirements
  - Pump selection
- Emergency Generators Part 1
  - Fuel
  - Indoor, outdoor, or portable
  - Exercising
  - Maintenance
- Emergency Generators Part 2
  - Sizing
  - Associated equipment
- Pump Station Control & Telemetry –
  - Types of telemetry
  - Control modes
  - Analog vs digital
  - Upgrading legacy control systems
- Vibration Analysis
  - Why vibration monitoring is important
  - What can it teach us
  - How to monitor
- Pump Seals
  - Purpose of pump seals
  - Types of seal
  - Importance of maintaining seals
  - How to tell if seals need replacement
- Pump Station Inspection
  - Frequency
  - Checklists
  - Pump & Motor Inspection
- E-O&M Manuals –
  - How are they set up
  - How to use them in the field
  - Updating