

# WATER WASTEWATER ELECTRICAL MAINTENANCE

WE IMPROVE WORKPLACE SAFETY & PERFORMANCE

## TRAINING DESCRIPTION:

In this program you will learn the basics of electricity and answer questions such as, what are current, voltage, resistance, and power. Ohm's Law will be discussed along with magnetism. You will learn about multimeters that can measure voltage, resistance, and current, as well as clamp-on ammeters, and capacitor testers. You will then learn about control components such as transducers, capacitors, float switches, relays, alternators, potential relays, and phase monitors. There will be an in-depth look at reading the electrical control drawings used in the water treatment industry.

You will learn about electric power distribution in your facility; three-phase, single-phase, transformers, and generation. Then you will move into a discussion on Electric Motors of all types and troubleshooting these motors. Motors are very simple to troubleshoot and we will show you how to determine if a motor is bad. We will wrap-up with a unique section we have created just for you called Troubleshooting Lift & Pump Stations. You will learn how to troubleshoot float switches, capacitors, phase monitors, alternators, pumps, and potential relays.

## TRAINING BENEFITS:

- Understanding of basic components.
- Better troubleshooting skills.
- Applicable skills available upon return to the workplace.
- Be able to spot hazards and avoid accidents.

## TRAINING TOPICS:

### FUNDAMENTALS OF ELECTRICITY

- Current
- Voltage
- Resistance
- Power
- Ohms Law
- AC/DC

### MAGNETISM

- Basic Magnetism
- The Solenoid

### WASTEWATER ELECTRICAL PRINTS

- Symbols
- Relays
- Motor Starter
- Ladder Diagrams
  - Layout
  - Reading
- Timers
- Special Devices

### TROUBLESHOOTING

- Safety Facts
- Voltage Checks
- Current Checks
- Print Troubleshooting

### CLASS DISCUSSION AND REVIEW

**2-DAY  
TRAINING**

CLASS SIZE: UP TO 20  
CLASS LENGTH: 12 HOURS  
CLASS NUMBER: N\_E602

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TECHNOLOGY