



# Training Capability Statement 2018

Excellence Through Water

# How Ecosafe International can Up-skill your Workforce

Ecosafe International Short Courses are designed to complement the Nationally-Accredited Certificate II and Certificate III Courses in Water Operations by offering the following:

- ✓ Site-Specific Contextualisation
- ✓ Suitability for Company On-boarding/Induction Processes and Requirements
- ✓ Refresher Training
- ✓ Options for either On-Site Delivery or at Murdoch University
- ✓ Ecosafe regularly interact with State Regulators and offer Up-To-Date and Best-Practice Training Solutions.
- ✓ Our Trainers are Articulate, Experienced and Accomplished Professionals in the Water Industry.
- ✓ All Training Sessions include a brief Competency-Based Assessment.
- ✓ A Certificate of Completion will be issued upon Successful Completion of the Course.





# Water Quality Awareness In Operations

## 1 Day Course

### Overview and Awareness of the following topics:

- Australian Drinking Water Guidelines (ADWG)
- Disinfection Processes
- Cross Connections and Backflow
- Chlorination - Breakpoint and Field Measurement
- Drinking Water Quality Management Plan (DWQMP) Awareness
- Water Quality Parameters
- Regulations and Guidelines
- Health, Safety and Environmental Considerations
- Water Quality Incidents Case Studies (Nationally and Internationally)
- Hygiene Practices to Protect Drinking Water System Integrity including Non-Potable Tool Disinfection
- Multiple Barriers of Protection
- Critical Control Points (CCP) and Critical Control Limits (CCL)
- Catchment Protection
- Flushing Programs
- Incident Response
- Reporting and Record Keeping

### Who Should Attend :

- Operators and tradespeople
- Any Person with Interaction with the Drinking Water System Infrastructure
- Managers and Supervisors



# Water Quality Awareness In Construction

## 1 Day Course

### Overview and Awareness of the following topics:

- Australian Drinking Water Guidelines (ADWG)
- Disinfection Processes
- Chlorination - Breakpoint and Field Measurement
- Drinking Water Quality Management Plan (DWQMP) Awareness
- Water Quality Parameters
- Regulations and Guidelines
- AS 4020:2005 - Products for use in Contact with Drinking Water
- Health, Safety and Environmental Considerations
- Hygiene Practices to Protect Potable Water System Integrity including Non-Potable Tool Disinfection
- Hygienic Storage and use of Pipes and Fittings
- Hygienic Installation Practices for Workers and their Tools
- Cross Connections and Backflow
- Commissioning Processes including Flushing
- Cut-ins/Connection to Existing Water Supply
- Lessons Learnt from recent WA high-profile projects
- Commissioning and Verification Testing
- Reporting and Record Keeping

### Who Should Attend :

- Tradespeople involved with Construction Projects
- Managers and Supervisors of Construction Projects





# Water Sampling And Monitoring

1 Day Course



## Overview and Awareness of the following topics:

- Sampling and Monitoring of Drinking Water, Raw Water, Process Water, Waste Water and Recycled Water
- Australian Drinking Water Guidelines (ADWG)
- AS 5667 – Water Quality Sampling
- AS 2031 – Water Sampling for Microbiological Analysis
- Drinking Water Quality Management Plan (DWQMP) Awareness
- Water Quality Parameters
- Quality Assurance and Quality Control Processes
- Health, Safety and Environmental Considerations
- Water Monitoring Programs
- Sampling Methodology
- Aseptic Sampling Techniques
- Disinfection of Sample Points
- Logistics and Sample Preservation
- Sample Bottles and Preservatives
- On-site Sampling and Testing
- Water Quality Portable Meter Use and Calibration
- Reporting and Record Keeping
- Cloud-based Database for Water Quality Data and Automated Responses

## Who Should Attend :

- Any person involved in the Collection of Water Samples or Monitoring of Water Systems

# Effective Water Disinfection Techniques

## 1 Day Course

### Overview and Awareness of the following topics:

- Regulations and Guidelines
- Australian Drinking Water Guidelines (ADWG)
- AS 3500 Section 16 – Disinfection of Water Services
- Super Chlorination – Calculations, Dilutions and Chemicals
- Neutralisation - Chlorine and pH
- Flushing, Mixing and Discharge Requirements
- Chlorine Contact Time
- Breakpoint Chlorination
- Field Water Quality Measurement of pH, Chlorine (Free and Total, Low and High Range), Ultraviolet Transmittance (UVT)
- Ultraviolet Systems
- Health, Safety and Environment Considerations including Chemical Handling
- Verification Sampling and Monitoring

### Who Should Attend :

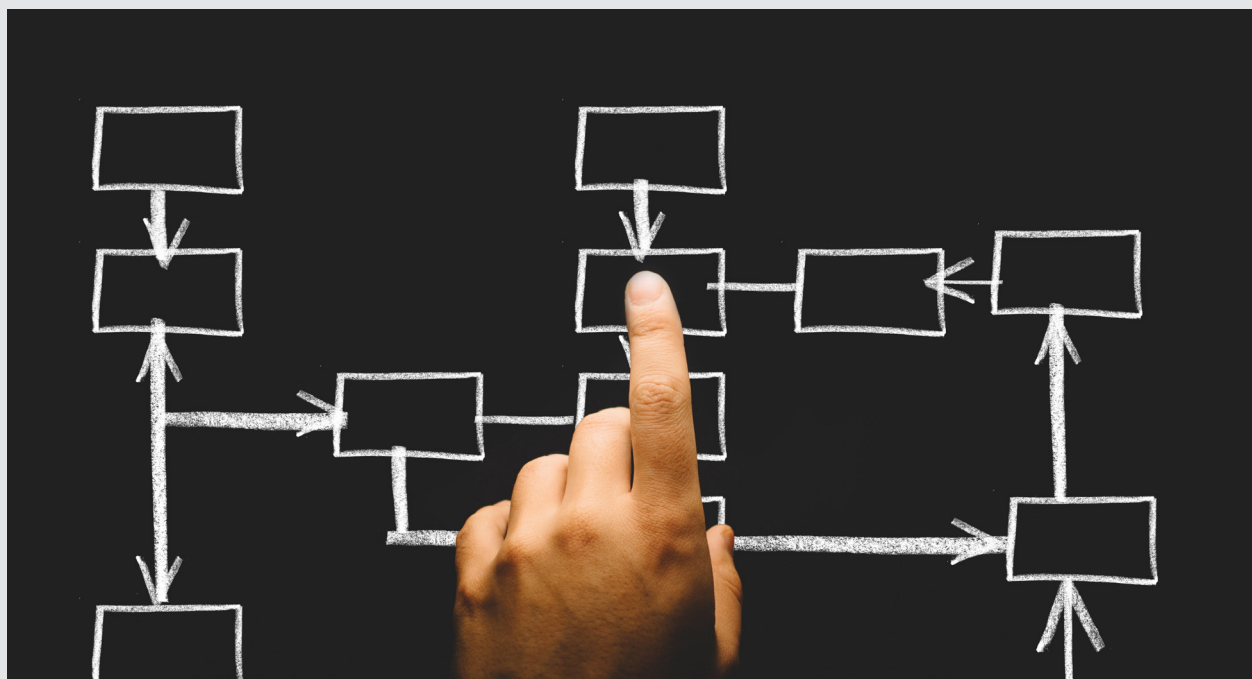
- Any person involved in the Disinfection of Water Equipment and Infrastructure



## 1 Day Course

- Australian Drinking Water Guidelines (ADWG)
- Water Quality Parameters
- Contaminants of Concern
- Regulatory Reporting
- Regulations and Guidelines
- Cation/Anion Balance
- Laboratory Processes Overview
- Quality Assurance and Quality Control Processes
- Risk Assessment of Guidelines Exceedances
- Incident Response Procedures (IRP) / Trigger Action Response Plans (TARP)
- Cloud-based Database for Water Quality Data and Automated Responses

- Any person involved in the Assessment/Interpretation or Response to Water Quality Results (both Field Measurements and Laboratory Results)
- Site Supervisors and Water Infrastructure Managers



# Recycled Water Awareness

## Half- Day Course

### Overview and Awareness of the following topics:

- Recycled Water
- Australian Guidelines for Water Recycling (AGWR)
- Guidelines and Regulations
- Key Supporting Documentation:
  - RWQMP (Recycled Water Quality Management Plan)
  - HACCP (Hazard Analysis and Critical Control Points)
  - Recycled Water Supply Agreements (RWSA)
  - Incident Response Plans (IRPs)
- Key Water Quality Risks
- Sources of Recycled Water and their Differing Management Processes
- Overview of Treatment Processes
- Disinfection Processes
- Exposure Controls
- Health Based Targets (HBTs)
- Health, Safety and Environmental Considerations
- Critical Control Points and Critical Control Limits
- Key Sampling Considerations
- Reporting and Record Keeping

### Who Should Attend :

- Any person involved in the Assessment/ Interpretation or Response to Water Quality Results (both Field Measurements and Laboratory Results)
- Site Supervisors and Water Infrastructure Managers





# Legionella Awareness

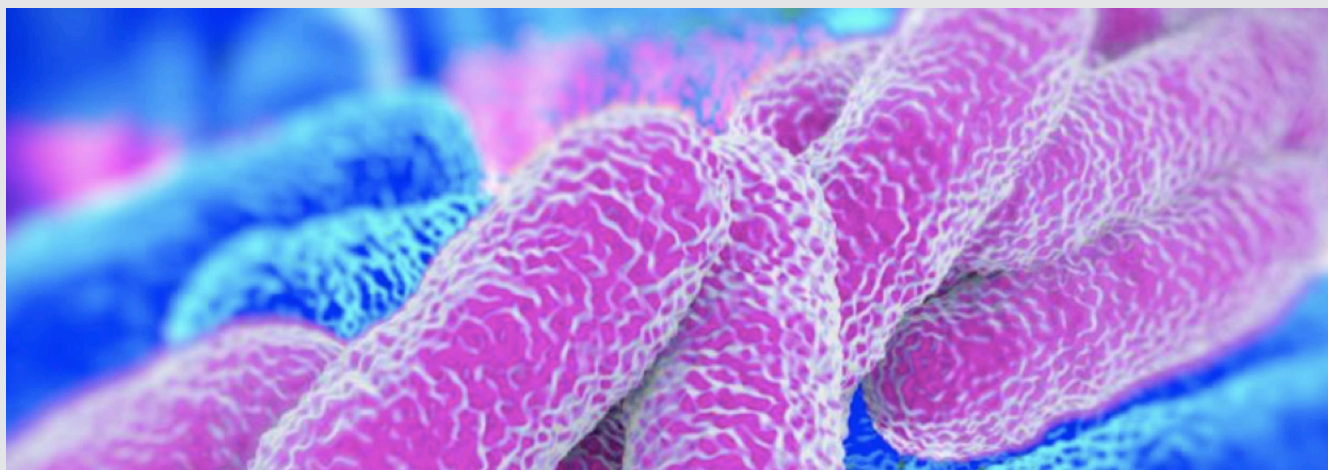
## Half- Day Course

### Overview and Awareness of the following topics:

- Introduction to Legionella
  - What is it
  - Why is it an Issue
  - Causation Chain
- Guidelines and Regulations
  - EnHealth – Guidelines for Legionella Control
  - AS 3666 – Air-Handling and Water Systems
  - Western Australian Government Code of Practice for Prevention and Control of Legionnaires' Disease
- Legionella Risk Management Plans (LRMP)
- Multiple Barriers of Protection
- Water Infrastructure System Risks
- Clinical Risks
- Brand Protection – News/Media Coverage
- Minimising Facility Down-Time
- Recent Incidents/Outbreaks/Deaths and Case Studies
- Operational Management
  - Stagnation management
  - Chlorine Control
  - Temperature Control
  - Water Quality Testing and Monitoring
  - Field-Testing and Corrective Action Responses
- Validation Testing and Monitoring
- Reporting and Record Keeping
- Cloud-based Database for Water Quality Data and Automated Responses

### Who Should Attend :

- Any person involved in the Operation, Construction, Maintenance or Monitoring of Water Systems that may be Susceptible to Legionella (such as Cooling Towers, Warm-Water Systems, Fire Water Systems and Transient Accommodation/Facilities, Aged-Care and Health-Care Facilities)
- Site Supervisors and Water Infrastructure Managers



# Why Choose Ecosafe?

Ecosafe International is a dynamic and independent risk management consultancy which focuses on the interface between water and health across the water cycle. We have a proven track record and pride ourselves on the provision of practical risk based solutions across all our sectors. Our independence ensures our clients receive sound, balanced advice upon which to base management decisions.

## Client's we've worked with:



RioTinto

serco



BHP



## Contact Us

Our Team is ready to discuss your water related needs and address any queries surrounding our service options.

### Head Office

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Although our Head Office is based in Western Australia, Ecosafe International covers a geographically diverse client base and operates nationally across Australia as well as internationally. Our network extends far wider than our own operational staff through tested working partnerships with a large network of reputable professionals, associations and academics.