

Municipal Drinking Water Production, Supply and Quality Monitoring



Focus on: **The Manager** **The Specialist** **Spotlight Programme** **Hands-on Skills**

Course Overview

Global water scarcity poses severe restrictions on water usage. Municipal domestic water is one of the most important areas affected. This course will provide a holistic approach to this topic, covering all critical stages before water reaches consumers' taps. The production and/or treatment side, the supply operations and all issues relating to regulatory compliance and consumer satisfaction will be dealt with in detail. Specific attention will be given to handling customer complaints and monitoring the quality.

Course Objectives		This Course is Ideal For:	
1	Develop an understanding of the global water scarcity problem and associated risks	✓	Hygiene and health & safety inspectors
2	Become familiar with water composition terminology	✓	Process engineers in Water treatment plants
3	Understand the most important water quality parameters and their interpretation	✓	Water Quality consultants
4	Develop and implement water quality monitoring programmes	✓	Local authorities involved in drinking water storage and distribution
5	Investigating customer complaints and taking appropriate corrective actions		

Course Content

Day	Theme	Coverage
1	Introduction to drinking water	<ul style="list-style-type: none"> Sources of drinking water Typical characteristics of water from different sources Basic definitions on water composition Physical, chemical and biological properties of water Health risks associated with mains drinking water
2	Water Treatment	<ul style="list-style-type: none"> The need for water treatment Selection of Treatment technologies Filtration – Ion exchange – Desalination Disinfection techniques Combination of treatment techniques
3	Drinking water storage and distribution	<ul style="list-style-type: none"> Basic layout considerations Design and maintenance of storage tanks House connections Interactions between water and ageing distribution networks Monitoring of storage and distribution infrastructures - Smart metering technologies

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4	Monitoring the quality of drinking water	<ul style="list-style-type: none"> • Developing and implementing a monitoring regime • Sampling points • International Regulations and Standards on drinking water quality • Parameters to be tested • Interpretation of results – exceedances, fluctuations and trends
5	Troubleshooting	<ul style="list-style-type: none"> • Investigating failures in the distribution network • Non-revenue water (NRW) • Consumer complaints – validation and handling • Water Pollution and Water Contamination • Case studies

Course Assessment	Certification
<p>Participants will be assessed on:</p> <p>Participation in sessions</p> <p>Completion of exercises & case studies</p> <p>Performance in assessments</p>	<p>Upon successful completion of the course, participants will receive a Certificate of Successful Completion, along with a Transcript of Marks showing the performance by grade in each element of assessment and overall.</p>

Course Instructor

This speaker holds a B.Eng. (Hons) degree in Chemical with Biochemical Engineering and an MBA degree, both from the UK.

He has a 35-year experience as director of an ISO17025 accredited laboratory, and he is a water quality consultant to various organizations, including Water Boards, Healthcare facilities, the Hospitality industry, water treatment companies and desalination plants, food manufacturing premises and petrochemical storage terminals.

He is also one of the leading experts on the control and prevention of Legionnaires' disease.