# WATER CONSERVATION, DEMAND AND LOSS MANAGEMENT





REG NO.: 2017/019853/07

24 - 25 OCTOBER 2019 JOHANNESBURG

#### WATER CONSERVATION, DEMAND AND LOSS MANAGEMENT TRAINING

Water Conservation is becoming one of the most important issues facing the world and the provision of safe drinking water, taken for granted in most developed countries; is clearly a luxury in many parts of the developing world. The challenge of providing safe drinking water to everyone around the globe, is unlikely to be achieved in the near future, however, it is possible to maximise the benefit of the available water resources by ensuring that all water is used effectively and leakage from the distribution systems is reduced where possible.

Water Conservation is therefore one of the key focus areas worldwide and is one of the specialist services offered by Ian and Mike Consulting. Access to clean water is one of the critical environmental issues of the 21st century. Obtain an understanding of water management and conservation with practical knowledge and skills as well as an insight into water recycling and industrial applications.

#### **COURSE DESCRIPTION**

This course provides Water Service Institutions with the knowledge, skills and on-going support to:

- Achieve a reduction in real water losses by applying water balances and related intervention methods
- o Achieve and then maintain "No-Drop" Status through partnership
- Maintain the water quality within reticulation system by applying accepted reticulation system repair and maintenance methods
- Explain the importance of water in the world and the reasons for its sustainable conservation and management.
- Explain the importance of water conservation and methods to save water at the workplace.
- o Explain the importance of water conservation and methods to save water at home.
- Explain water flow and quality control.
- Explain water audits and water management plans.
- Explain the importance of water conservation and methods to save water in Horticulture
- Explain the importance of water conservation and methods to save water in Agriculture.
- Explain the importance of water conservation and methods to save water in the Services Industry.
- Explain the importance of water conservation and methods to save water in the Health Industry and allied services.
- Explain the importance of water conservation and methods to save water in other occupations.
- Explain water sanitation and wastewater treatment methods and the difference with water reuse and recycling.

#### WHY TO CONSERVE WATER?

Human beings cannot survive more than 3 days without any source of water. Neither can other animals or plants. Water is life. Water is needed to move, eat, reproduce, work and think, in other words, to survive and to live. Water resources are challenged in our world today due to pollution and overuse of the local resources. There are also fights for water between different users: farmers, people in cities and industries. There also rivers that cross frontiers, and thus there some problems in the sharing and use of the water between different countries. We are using much more water than what is really needed and available in many locations around the

world. This is due sometimes because of lack of water, but more often it is due to a bad management of the water resources available, bad or non-existent urban planning and bad or non-existent population planning.

We are also wasting our water resources when we are discharging our wastes and sewage into it, making the receiving waters unsuitable for life and in many cases even unsuitable for industrial or agricultural use.

#### **DETAILED COURSE OUTLINE**

Each course is made up a number of lessons or units. Each of these has self-assessment questions, a set task (practical homework) and an assignment

#### Introduction to water conservation

- Importance of water
- The water cycle rainfall, evaporation, infiltration, effective rainfall
- Water sources and storage water quality
- Facts on water uses water use at home, in primary and other industries
- Why conserve water personal, regional and global significance

#### Water conservation at home

- Measures undertaken to save water in the home in the kitchen, bathroom and in the garden.
- Water Saving Devices

#### Water conservation in the workplace

- General principles
- Implementing water saving strategies
- Installing small appliances
- Large water saving devices

#### Water management

- Water quality maintaining water quality, salinity, chemical contaminants
- Controlling Use and Quality of Water, water flow measurement, water quality control, testing water salinity
- Preserving Water Quality minimising evaporation, water sanitation
- Water Audits
- Water Management Plans

#### Water conservation in Primary Production I

- Water Saving Measures
- Water Wise Plants
- Water Wise Procedures
- Water Wise Irrigation systems
- Water Wise Landscaping
- Equipment, structures and tools to save water

#### Water conservation in Primary Production II

- Use of water in primary production
- Methods of water storage
- Rainwater collection and storage
- Bore water
- Farm dams planning, lined ponds

- Water Requirements livestock requirements, domestic requirements
- Water Quality
- Water Problems on Farms contamination and disposal of water, evaporation, seepage, runoff, overspray, scheduling
- Using Farm Waste Water
- Irrigation System Design
- Maintenance Procedures and Scheduling
- Surface/Flood Irrigation
- Sprinkler Irrigation
- Swales and Keylines

#### Water conservation in Services industries

- Use of Water in Services Industry
- Contamination and Disposal of Water
- Reduce/Reuse/Recycle

#### Water conservation and Health

- Hospitals, nursing homes, laundries, clinical laboratories, dental practices, human and animal research facilities
- Uses of water in Health Industry control pathogens, general use
- Water minimisation
- Water efficiency

#### Water conservation in other sectors

- Use of water in manufacturing, construction and heavy industry
- Water use in the production process
- · Examples of water using activities in food facilities
- Water holding
- Benefits of cleaner production

#### Water treatment, reuse and recycling

- Water Sanitation filtering and disinfection
- Water Reuse and Recycling classification and composition of waste water.
- Recycling Wastewater
- Wastewater treatment
- Suitable plants
- Treating saline water

# **REGISTRATION FORM**

## WATER CONSERVATION, DEMAND AND LOSS MANAGEMENT



# 24 - 25 OCTOBER 2019 **DURBAN**

Please complete the form and return to office by email to: herbert@mikeandianconsulting.co.za Contact person Herbert: 011 886 1336

Company Name:		VAT Reg No.:	
Email	Tel:	Fax	
Delegates Details			
Name:	Surname	Position	
Name:	Surname	Position	
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Name:	Surname	Position	
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	Authorize		
		on	
Signature		Date	
Pleas	e Note: This contract is not valid	without an Authorised signature	
PAYMENT METHOD			
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BANK DEPOSIT

ELECTRONIC TRANSFER

CHEQUE

### TERMS AND CONDITIONS

Confirmation Your registration will only be confirmed until such time as payment is received and may be subject to cancellation.

Right of Admission –
Mike and Ian Consulting serves the right to refuse admission to the training course where evidence of full payment cannot be shown through a proof of payment document.

Delegate Substitutions –
Delegate substitutions are welcomes at any time and do not incur any additional charges. Please notify us in writing of any such changes.

Delegate Cancellations –
All delegate cancellations must be received in writing and are subject to the following conditions: for any cancellations received 20 working days before the start of a training course, Mike and lan Consulting will issue a 100% credit for the value paid to be used for up to six months from the date of issue for any future Mike and lan Consulting course for any cancellations received less than 20 working days before the date of the training course, the full fee will be payable and no refunds or credit notes will be given if a registered delegate delegate does not cancel and fails to attend the training course, this will be treated as a cancellation and no refund or credit note will be issued. Delegate substitutions are welcome-Please notify us 5 days before the event Mike and lan Consulting cancellation and Postponement policy. In the event that Mike and lan Consulting cancels an event, delegate payments will be refunded, in the event that Mike and lan Consulting postpones an event, delegate payments in the postponement date will be credited towards the rescheduled date. If the delegate is unable to attend the rescheduled event, the delegate will receive a 100% credit representing payments made towards a future event. This credit will be available for up to six months from the date of issuance. No refunds will be available for postponements. Mike and lan Consulting is not responsible for any loss or damage as a result of a substitution, alteration or postponement of an event. Mike and lan Consulting shall assume no liability whatsoever in the event this training course is rescheduled or postponed due to a fortuitous event, Act of God, unforeseen occurrence or any other event that renders performance of this training course impossible. For purposes of this clause, a fortuitous event shall include, but not be limited to: war, fire, labour strike, extreme weather or other emergency.

**Payments** 

Payment due seven days from date of invoice. The fee covers attendance at the event, workshop documentation and refreshments

Cancellations and Substitutions -

A substitute delegate may be sent at any time for no additional charge. Cancellations must be received in writing, by fax or letter, no later than 14 days prior to the event for a refund (less an administration charge of 25% plus VAT). Regrettably, no refunds can be made after that date.

Programme Changes Mike and Ian Consulting reserves the right to make any necessary changes to the advertised program. The views expressed by the speakers are not necessarily those held by the organizers, nor is the organizer responsible for these opinions or statements but we will strive to produce results based on ethics and integrity

#### **BANKING DETAILS:**

Account Holder: Mike and Ian Consulting Pty Ltd

Standard Bank Bank Details: Bank Acc No: 300489501 Branch Code: 018005

Account Type: **Bizlaunch Account** 

Branch: Randbura DELEGATE FEES **8,550** Exc VAT

Registration: To secure your seats, we encourage you to register early, as space can be limited due to our hands on approach and training methodologies. Registration fee covers all program materials, refreshments during breaks and lunch, parking fees, but excludes accommodation.

PLEASE NOTE: YOU CAN SAVE UP TO 30% ON OUR IN-HOUSE PROGRAMS. SAVING ON ACCOMMODATION AND TRANSPORTATION AS WELL!!

