



**Dr Wynand Vlok**

In Association with

**Esprit Skills Development and Training**

*Presents two 4 days Short Courses on Water Care*

## **COVID-19 Water Quality Management and Monitoring Course**

### **Course Summary**

#### **Water Care - WATER IS THE DRIVING FORCE IN NATURE**

Water quality is a term used to describe the chemical, physical and biological characteristics of water, usually in respect to its suitability for an intended purpose. These characteristics are controlled and influenced by substances, which are either dissolved or suspended into water. Water quality is changed and affected by both natural processes and human activities. Generally natural waters quality varies from place to place, depending on seasonal changes, climatic changes and with the types of soils, rocks and surfaces through which it moves.

A variety of human activities e.g. agricultural activities, urban and industrial development, mining and recreation, potentially significantly alter the quality of natural waters and changes the water use potential. The key to sustainable water resources is therefore to ensure that the quality of water resources are suitable for their intended uses, while at the same time allowing them to be used and developed to a certain extent. Effective management is the tool through which this is achieved. Water quality management, therefore involves the maintenance of the fitness for

use of water resources on a sustained basis, by achieving a balance between socio-economic development and environmental protection.

From a regulatory point of view the "business" of water quality management entails the ongoing process of planning, development, implementation and administration of water quality management policy, the authorization of water uses that may have, or may potentially have, an impact on water quality, as well as the monitoring and auditing of the quality of water

This 4-day course is designed to provide the background for persons working at all levels in the water treatment industry. It introduces aspects to familiarise the course attendant with the world in which he or she operates. The course addresses a number of skills and will include discussion groups and a practical excursion. The level of the course is of such nature that no previous knowledge is required.

In this very interactive workshop, you will learn valuable tips on the essential tasks on water treatment.

**Organised by: Esprit Skills Development & Training** [www.espritskills.co.za](http://www.espritskills.co.za)  
**National Treasury MAA0113018**  
**Enrol now on Tel: (+2711) 391-2022 or Mobile/Whatsup : (+2783) 294 0731**  
**[Kobie.esprit@telkomsa.net](mailto:Kobie.esprit@telkomsa.net) or [admin.esprit@telkomsa.net](mailto:admin.esprit@telkomsa.net)**



## Are You the Solution to Water Pollution? LEARNING OUTCOMES

After completing the workshop successfully, participants will be equipped to:

- Understand the effects and consequences of polluted water.
- Recognise the early warning signs of polluted areas.
- React appropriately to suspected pollution.
- Limit your exposure.
- Be proactive in preventing water pollution in the legal framework

## WHO SHOULD ATTEND?

Delegates should represent a wide range of personnel in the organisation who are in the following capacities:

- Water Plant Superintendents/Managers
- Water Plant Purification Staff
- Artisans
- Water Foremen
- Ground Water Management Staff
- Waste Water Treatment Staff
- Risk Managers, Finance Managers, Project Managers, HR Managers, Training Managers
- Town Planners
- Safety Managers
- Plumbing Staff
- Monitoring/Evaluation staff in water management

**Protea Hotel, Sea Point, Cape Town, South Africa**  
**18<sup>th</sup> January to 21<sup>st</sup> January or 15<sup>th</sup> February to 18<sup>th</sup> February 2021**  
**R10 100/USD \$950 (Excl VAT)/ Delegate**  
**COVID 19 Safety will apply**  
**Travel/Number of delegates, safety of delegates will remain first priority on accepting bookings**

**Enrol now**

**Tel: (+2711) 391 2022**

**Mobile: (+2783) 294 0731**

**Email: [kobie.esprit@telkomsa.net](mailto:kobie.esprit@telkomsa.net)**

### Key Benefits of Attending

*You will learn how to:*

- *Identify pollution **in the early stages***
- *React appropriately to **water pollution***
- *Understand **Aquatic ecosystems***
- *What the complexity of **aquatic ecosystems** and the **IWRM** involves.*

**“Providing water and sanitation may not guarantee peace, but it reduces the chance of grievance that leads to armed conflicts”**

### OUR UNIQUE RESULTS-DRIVEN APPROACH

Our unique approach to providing our clients with business development services include:

- Ensure to make a difference to the bottom-line of businesses and organizations

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- Strive to meet transformation requirements by empowering and uplifting the previously disadvantaged
- Secure long-term business relationships
- Implement customized aligned business strategies
- Honour the dignity and worth of all people at all times
- Strive to deliver with excellence

**Day 1: Monday 08:00 for 08:30 until 16:15**

**Module 1: An introduction to chemical concepts**

- Atomic structure, molecules and compounds. Chemical bonding, mole concept and chemical calculations. Concentrations and solutions, acids, bases, salts, oxidation and reduction.
- The balancing of equations. Basic chemical kinetics and chemical equilibrium. Basic organic chemistry.

**Module 2: An introduction to water**

- Physical and chemical properties of water. The concepts of pH, EC, DO and TDS.
- The hydrological and nutrient cycles.

**Module 3: Catchment and Integrated Water Resource Management (IWRM)**

- What is a catchment or river basin? Impacts associated with the catchment. Structures and strategies to manage the catchment.
- Introduction to IWRM. Concepts and functions of the process. Implementation of the IWRM programme.

**Module 3: Discussion-Catchment and IWRM**

**Day 2: Tuesday 08:15 until 16:15**

**Module 4: Environmental Impact Assessments (EIA) and Environmental Management Plans (EMP)**

- Introduction to EIA's. Components of EIA and the EIA process.
- Introduction into EMP's. The process and components of an EMP.

**Module 4: Discussion- Management strategies**

**Module 5: Resource monitoring of and monitoring techniques**

***"Clean water is a human right"***

Comparing monitoring and biomonitoring. The structure of a biomonitoring programme.

- Brief introduction to monitoring protocols and indices. Practical pointers for biomonitoring.

**Module 6: Sources of Pollution and Control measures**

- Types of pollution. Sources of water pollution including "point source" and "non-point source" pollution.

**Module 6: Discussion - Water pollution**

**Day 3: Wednesday 08:00 for 08:30 until 16:15**

**Module 7: Pathogens and their role in water.**

- Introduction to pathogens and waterborne diseases and how humans are affected.

**Module 8: Introduction to water purification**

- Introduction to the purification process and the components associated with a water treatment process/plant.

**Module 9: The water purification process**

- Detailed discussion of the treatment process, structures and equipment.
- The concept of water sterilization. Explanation of the processes and equipment used.

**Module 9: Discussion – pathogens and purification**

**Module 10: Practical session (equipment and sampling)**

**Day 4: Thursday 08:00 for 08:30 until 16:15**

**Field Work: Potable water purification, equipment and sampling**

**Final session Discussion & Certification**

***"Water is not just a human health issue, not just an economic development or environmental issue, but a peace and security issue."***

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Two thumbs up for your training requirements

### **All about the Course Presenter**

**Wynand Vlok, was involved in tertiary education for more than 15 years and has more than 30 years' experience in water related matters. He has a PhD in Zoology and is a wetland and water quality expert that has worked extensively in wetlands in South Africa. In addition to his extensive publication record he has managed the team that developed the Course Masters in Aquatic Health and is part of a team that is contracted to develop a Course Masters in Resource Directed Measures.**

### **ESPRIT HAS SERVED THE FOLLOWING COUNTRIES ON THIS TOPIC:**

South Africa, Botswana, Namibia, Seychelles, Tanzania, Uganda & Zambia  
Our happy clients include: Breede Overberg CMA, BCL Mining, Islands Development Corporation, Ministry of Water Affairs, Lusaka Water & Sewerage Corporation, Ekurhuleni Metropolitan, the Botswana Defence Force Engineering Corps Ministry of Water Affairs Uganda, Pangani Basin Tanzania and many more.

### **Comments from previous Delegates:**

A lot of knowledge in the shortest time and well delivered- C Tusiime MWE Uganda  
He was very good presenter & teacher- M D Daphine, MWE, Uganda  
He is highly knowledgeable, intelligent and well exposed to every aspect of the subject – F Atuingusa

Presenter has in-depth knowledge of the subject matter coupled with practical hand on experience - C Balidawe - Ministry of Water Environment Uganda

The material was good, I wish other people from my Company especially the Environmental Department should also expend this to water department in my Country- Mr Babolok BCL Mining  
Very impressive documentation and stationery. Presenters very clear on topics - Cynthia Ortmann  
Ministry of Water

It was an eye opener for the Water Sector employees - Anna Haufiku, Giz - Nwrm  
A lot of fruitful information in a short period of time - B B Harasels, Omaruru Basin Management Committee

Highly skilled & experience team. I enjoy and really learned a lot. Good presentation with a great time length - Paaherani Ngunovandu, Ministry of Agriculture, Water & Forestry  
Knowledge enhancing & educative- Lt K G Bathedi Botswana Defence Force, Corps of Engineers

The course is of much significance because it equips people with the skills of how to make water safe - N Nfazo , Botswana Defence Force Corps of Engineers

Enlightment about water quality management because it's a basic need - L Mosepedi BDF - Corps of Engineers

## **Keeping Water Clean. It's Everybody's Business**

**Building cemeteries away from human settlements to erecting fences around graves, plans to protect the country's water supply from contamination if mass coronavirus burials become a necessity**

**With researchers noting that little is known about how long the novel coronavirus survives in water, poorly planned burials that could result in the virus or other pathogens passing into water supplies Some viruses — like polio — can move through soil and groundwater, and it's possible the novel coronavirus could do the same**

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## Registration Form

**Yes!** Please accept my registration for (please tick)

- **Water Management & Monitoring –January 2021 or**
- **Water Management & Monitoring –February 2021  
Cape Town, South Africa**

Mr/Mrs/Ms: \_\_\_\_\_

Position: \_\_\_\_\_

Organisation: \_\_\_\_\_

Main line of Business: \_\_\_\_\_

No of Employees:  <50  50-150  150-500  >500

Address: \_\_\_\_\_

Postcode: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

Email: \_\_\_\_\_

Approving Manager: \_\_\_\_\_

Position: \_\_\_\_\_

### METHOD OF PAYMENT:

Cheque made payable to: Esprit Skills Development & Training

Direct Deposit: Esprit Skills Development & Training

Standard Bank SA, Branch Code: 012442, Account: 020213255

Swift Code SBZAJJ

Payment must be received at least 7 days before start of event, to ensure your place is held. Seats will not be held open after this date.

**\* IT IS IMPORTANT TO RESERVE YOUR PLACE EARLY AS SEATING IS RESTRICTED TO ENSURE ALL PARTICIPANTS RECEIVE EFFECTIVE TRAINING**

All cancellations must reach us 7 days before the event, failing which, a 50% cancellation fee will be levied

### Water Quality Management (Cape Town South Africa)

This fee includes all training material, CD, framed certificates, lunch and refreshments during the duration of the course.

#### POSTAL ADDRESS:

Esprit Skills Development & Training  
P.O.Box 6835  
Birchleigh, South Africa  
1621

#### CONTACT:

Kobie  
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### About Esprit Skills Development & Training

Esprit Skills Development and Training provides a service to its clients by understanding their requirements and assist them to train their employees.

We source the knowledge of experts in the field, locally and abroad, customize their product range to be aligned according to the standards set by the SETA's and SAQA. Esprit Skills is accredited with Services Seta.Ref 3924

The Progressive Business Forum also welcomed Esprit as member on 13 June 2008 for the role we play in shaping the economic future of the Rainbow Nation. (Membership Number JHBS6441)

The criteria of the venues are chosen so that it can be reached by public transport, the facilities are inspected prior to the workshops or conferences to ensure that the delegates receive optimum support to focus on the purpose of their visit namely training. Food, soft drinks and savories are offered to delegates.

The delegates are grouped according to their respective needs and profiles of delegates are given to the trainers prior to the session to ensure that their exact purpose or training needs is addressed.

Every delegate that follows our outcomes based training walks away with hands on knowledge that can be applied to the workplace in their respective industry.

Course materials supplement the training and framed certificates of attendance are given to delegates.

Cost per Delegate (excl VAT)	
SA Rand	USD \$
10 100	950

# Save water, it will save you later

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