

CAPACITY BUILDING IN SUPPORT OF BD/GD/ND REGULATION PROGRAMME UNDER FETWater, Phase III



2.0 Approach

The proposed approach for capacity building in support of the drinking water quality, wastewater and water use efficiency programmes will make use of workshops and other mediums to learn and share over the period March 2015 – March 2017. The services of experts from various appropriate backgrounds and disciplines based in institutions of higher learning, Science councils and Private Consulting will be secured to prepare learning materials and facilitate the training. The facilitators will enter into contractual agreement with the WRC to develop appropriate SETA accredited training material and also providing training as part of capacity building recognized by the National Qualifications Framework. Three workshops per year over three years are proposed, with each workshop training 20-30 people per week drawn from each of the nine province. The target overall number to be trained over 3 years would range from 180 – 270 candidates in the water sector.

APPROACH - CONTD

The capacity building approach will initially focus on wastewater for two reasons;

- wastewater quality generally impacts drinking water quality
- Green drop certification is generally more difficult to attain compared to Blue drop certification
- In this regard, the South African Guidelines, Manuals and literature on wastewater treatment compiled from 1985 – 2010 will be utilized as a reference document for training material development.
- The following topics will be utilized as basis for training material development, and they incorporate both theoretical and practical components quite useful for water professionals' capacity development;

BROAD TOPICS FOR CONSIDERATION

- Wastewater Treatment Principles, Planning and Design
- Wastewater Operation and Maintenance
- Wastewater Treatment and Pollution Control (Compliance)
- Wastewater Effluent Re-Use, Recycling and Reclamation
- Industrial Effluent Management
- Pond Systems and Wetlands
- Bio filter or Trickling Filter Treatment Systems (Attached media)
- Activated Sludge Treatment (Nutrient Removal & Bulking)
- Anaerobic Digestion and Energy
- Sludge Treatment and Technology (Sludge Co-disposal, Re-Use and Bioremediation)
- Standards, Monitoring, Analytical Testing and Water Quality Guidelines
- Infiltration, Ingress to Sewers and Sewer Collection Systems
- Technology Selection and Sustainability
- Regulation, Licensing and Inspection
- Asset Management
- Water Services Risk Management (WSPs & W₂RAP, Risk Q)

TOPICS CLASSIFICATION INTO FETWater, Phase III THEMATIC AREAS

Water Use, Services & Sanitation

- Wastewater Operation and Maintenance
- Wastewater Treatment and Pollution Control (Compliance)
- Wastewater Effluent Re-Use, Recycling and Reclamation
- Industrial Effluent Management
- Pond Systems and Wetlands
- Bio filter or Trickling Filter Treatment Systems (Attached media)
- Activated Sludge Treatment (Nutrient Removal & Bulking)
- Anaerobic Digestion and Energy
- Sludge Treatment and Technology (Sludge Co-disposal, Re-Use and Bioremediation)
- Water Services Risk Management (WSPs & W₂RAP, Risk Q)

CAPACITY BUILDING

Water Infrastructure

- Technology Selection and Sustainability
- Infiltration, Ingress to Sewers and Sewer Collection Systems
- Wastewater Treatment Principles, Planning and Design

Water Monitoring & Assessment

- Standards, Monitoring, Analytical Testing and Water Quality Guidelines

Water Regulation Requirements

- Regulation, Licensing and Inspection
- Asset Management