

Effluent Water Treatment Systems & Design Operations & Maintenance for small wastewater systems & Treatment Plants

FNB Conferencing & Learning Centre, Sandton, Johannesburg
12th -14th October, 2009

Conference Overview

Around 2.2 million die of basic hygiene related diseases, like diarrhoea, every year. The great majority are children in developing countries. Interventions in hygiene, sanitation and water supply make proven contributors to controlling this disease burden. For decades, universal access to safe water and sanitation has been promoted as an essential step in reducing this preventable disease burden.

Nevertheless the target "universal access" to improved water sources and basic sanitation remains elusive. The "Millennium Declaration" established the lesser but still ambitious goal of halving the proportion of people without access to safe water by 2015. Achieving "universal access" is an important long-term goal. How to accelerate health gains against this long-term backdrop and especially amongst the most affected populations is an important challenge.

This conference will highlight the following issues:

- Clarifying the main issues regarding wastewater treatment processes
- Providing technicians with practical tools
- Small Waste Water Treatment Systems
- Treatment Technologies
- Management of drinking water treatment plants
- Sustainability issues
- Regulatory frameworks
- Odour and flooding control
- Wastewater treatment design principles
- Wastewater Treatment Plant Operations and Maintenance (O&M)
- Onsite Treatment and Disposal Systems - Septic Tanks and compact plants



Introduction to Small Waste Water Treatment Systems

- Decentralised Waste Water Treatment Systems
- Package plants trends and technologies- a South African Benchmark
- Current Status of Wastewater Treatment Works in South Africa
- Overview on the Design Manual for small Wastewater Treatment Works
- Waste Water treatment in urban and rural South Africa- present and future applications of membrane dependent technology
- Technology Choice in the context of climate change and skills shortages

Operations and Maintenance of Small Waste Water Systems

- Repair and Maintenance Programme applied to Wastewater Treatment Installation
- Management, Maintenance and Operations of Waste Stabilisation Ponds
- Operation of Small Wastewater Treatment Systems
- Technical Consideration for Controlling Small Decentralised Used Water Reclamation Plants from the perspective of Municipal and Water Authorities
- Regulating Small Wastewater Treatment Works.

Regulatory Aspects and Tools

- Regulatory Aspects towards Small Wastewater Treatment Systems
- Wastewater Management: Comprehensive Intervention Framework
- Development of a Consolidated Wastewater Treatment System Assessment Tool
- Incentive Based Regulation towards Effective Wastewater Services
- Green Drop Status Evaluation-WSA Perspective

Current Trends in Water Quality Assessment

- Revisiting the reserve concept in the National Water Act
- The River health Program
- An assessment of microbiological variables, chlorides and electrical conductivity
- Analysing the ecological state of the river

Treatment Technologies Small Waste Water Treatment

- The Development of a New Filtration Solution for Desalination Applications
- Adsorption coupled with Electrochemical Regeneration as a novel approach to water and wastewater treatment
- The use of Package Treatment Plants for Temporary and Emergency Potable and Waste Water Treatment

Water Quality Issues

Catchment Water Quality Model: Sensitivity of Pollutant Build-Up and Wash-Off Parameters
Cryptosporidium Species and Distribution in Scottish Drinking Waters-Shaping Future Policy
Manganese Removal in Potable Water Treatment – Ironed out
Analytical Issues in Relation to the Determination of Metaldehyde in Raw and Potable Water
Occurrence and Removal of Metaldehyde by Traditional Treatment Processes

Disinfection

THM and Chlorite Reduction through Alternatives to Pre. Chlorination
Development of Automatic Control Algorithms to Minimise THM Formation
High Performance Electrochemical Ozone Generation
Prediction of Chlorine and pH of Drinking Water by using Gradient Descent Back Propagation Algorithm

Sustainability Issues

Cultural Heritage Conservation in the Event of Major Emergencies
Sustainability through Engineering Design – A case Study in Integrated Water Management
Can water be sustainable in Isolation?
The Industrial Water Cycle, Sustainability Economics and Africa
Sustainable Management of Water and Sanitation Services in Sub Saharan Africa
Water Quality Modelling to Assess the Impacts of a Proposed Wastewater Recycling Scheme on the River

KPI's and Process Optimisation

Performance Guarantees, are they Fit for Purpose
Application of KPI's in Large WWTW Operation and Optimisation
Advanced Process Control for the Water Industry

Preliminary and Primary Treatment

No More Tanks - Use of UV to Meet Bacteriological Reduction Requirements on Storm Tank Effluent
Preliminary Treatment at Wastewater Treatment Works - A Suppliers Perspective
Use of Zickert Scrapers in Primary Settlement

Secondary Treatment

A New Approach to Membrane Systems HUBER VRM – The Rotating Bioreactor Industrial and Municipal experiences
Potential of Using Energy Crops as Biological Filters for the Bioremediation of Sewage Effluent

Nitrogen and phosphorus

Nitrogen-Limitation-Induced Carbon and Phosphorus Fluxes in Anaerobic/Aerobic Sequencing Batch Reactors
Modelling Of the Partial Nitrification Process in a Sequencing Batch Reactor
Nutrient removal (tertiary and reject water treatment) and possibly: Innovative filter improvements to comply with future European Water Directives
Phosphate Removal - the Chemistry and Techniques behind Chemical Dosing

Analytical Techniques

An extension to the algebraic slip model for hindered settling sludge in Computational Fluid Dynamics
Advancing Endocrine Disrupting Compound Analysis through Integrated Technology and Workflow Solutions
Emerging molecular technologies as aids in achieving compliance with the bathing water and shellfish directives

Odour Control

Tool for Predicting and Monitoring Wastewater Treatment Plants Odour Impact
The Impact of the PPC Requirements on the Management of Odour, Odour Control and Abatement at Sludge Treatment Centres
Global Knowledge Prevents Odours in Your Backyard
New Developments in Reliable Odour Control
Sludge Tank Fugitive Odour Emissions
Advanced Biological Multistage Systems for the Treatment of Odours and Solvent Emissions

Flooding

The Changing Face of Sewer Flooding Regulation
Raising Awareness of Water Issues: Asset Resilience to Flooding
Protecting Key Infrastructure from Flooding – What can you do when the lights go out or the tap runs dry?
The importance of 2D Hydraulic Models to Identify Hydraulic Incapacity in Sewerage Systems and Consequential Effects

Regulations

Implementation of the Water Framework Directive at Wastewater Treatment Plants in South Africa
Managing the Costs of the Water Framework Directive and Other Environmental Compliance
Managing Surface Water Quality for The Water Framework Directive
Facing the Challenges of Dangerous Substances
Approaches to Asset Management: The South African Performance Improvement Case Study

Carbon & Energy Efficiency

Quantifying and Reducing Carbon Emissions – Severn Trent's Approach
Managing Carbon Emissions in the Supply
Climate Change Mitigation in Esholt WWTWs – Harnessing Power from Sewage through Innovation
Energy Efficient Sewage Treatment

Workshop

Environmental Impact of Small Waste Water Treatment Systems in African Countries (3 hours)

Target Group

Environmental Engineers
Plant Chemists and Engineers
Chemical Technicians
Water Chemists
Water Treatment Plant Operators
Boiler Plant Operators
Power Plant Operators
Risk Control Managers
Consulting Engineers
Water/Town Planners
Project Managers
Senior and Chief Municipal Engineers
Metropolitan, District and Local Municipal Managers
dealing with water Infrastructure

Our Speakers

Philip Pybus

Director Philp Pybus Engineers

Andrew Wood

SRK Consulting

Johan Kerkhoven

Farmsystems Managing Director

Leonardo Manus

Dept of Water Affairs and Forestry Manager Water
Quality and Waste Water Services Regulations

Sponsorship Opportunities

Are you a solution provider or consultant with a service to offer? If so, this is the ideal meeting ground to bring your services to the attention of the audience. So if you are a solution provider then this is unrivalled face-to-face access with these decision makers, who are actively looking to find solutions. Raise your profile in front of your ideal audience by partnering with us on this event. We have a variety of packages tailored to your needs. For partnership opportunities, please do not hesitate to contact us.

Conference Times

08:00 Registration & Coffee

08:15 Conference Commences

10:00 Tea/Coffee and Business Networking

12:30 Lunch and Business Networking

15:00 Tea/Coffee and Business Networking

16:00 Business Networking

Registration Form

Please write in BLOCK CAPITALS

Tel: +27 11 706 0966 | Fax: +27 86 547 8572
Email: lconsulting@polka.co.za

COMPANY AND DELEGATE DETAILS

Organisation: _____

Nature of Business: _____

Address: _____

City: _____ Postcode: _____

Phone: _____ Fax: _____

Delegate(s) Details:

1. Full Name: _____

Position: _____

Email: _____

2. Full Name: _____

Position: _____

Email: _____

3. Full Name: _____

Position: _____

Email: _____

4. Full Name: _____

Position: _____

Email: _____

5. Full Name: _____

Position: _____

Email: _____

FEES

(Please indicate your choice and complete the Authorisation Section)

Payment is required within 5 working days.

Price per Delegate = R7 990-00 Excl VAT

Group Discounts (price per delegate)

3 - 4 Delegates Less 10% = R7 200-00 Excl VAT

5 - 9 Delegates Less 15% = R6 791-00 Excl VAT

10+ Delegates Less 20% = R6 392-00 Excl VAT

Fees include refreshments, luncheons and supplementary documentation.

METHODS OF PAYMENT

Please indicate your choice of payment method

Cheque:

Made payable to Lyamba consulting

Bank Transfer: Bank Name: Standard Bank

Account Name: Lyamba Consulting Projects | Branch

name: Sandton City | Branch number: 01810591 |

Account number: 420906770 | Swift code: SBZAZAJJ

quoting delegates name and invoice number as a reference

AUTHORISATION

Signatory must be authorised to sign on behalf of contracting organisation

Name: _____

Position: _____

Email: _____

Signature: _____

Date: _____

THIS BOOKING IS INVALID WITHOUT A SIGNATURE

Terms & Conditions

1. Fees are inclusive of programme materials and refreshments.
2. Payment Terms: Following completion and return of the registration form, full payment is required within 5 days from receipt of invoice. PLEASE NOTE: payment must be received prior to the conference date. A receipt will be issued on payment. Due to limited conference space, we advise early registration to avoid disappointment. A 50% cancellation fee will be charged under the terms outlined below. We reserve the right to refuse admission if payment is not received on time. Unless otherwise stated on the booking form, payment must be made in SA Rands.
3. Cancellation/Substitution: Provided the total fee has been paid, substitutions at no extra charge up to 14 days before the event are allowed. Substitutions between 14 days and the date of the event will be allowed subject to an administration fee of equal to 10% of the total fee that is to be transferred. Otherwise all bookings carry a 50% cancellation liability immediately after a signed sales contract has been received by Lyamba Consulting (as defined above). Cancellations must be received in writing by mail or fax six (6) weeks before the conference is to be held in order to obtain a credit voucher representing 50% of the total fee to be utilized against the cost of any future conference. Thereafter, the full conference fee is payable and is non-refundable. The service charge is completely non-refundable and non-creditable. Payment terms are five days and payment must be made prior to the start of the conference. Nonpayment or non-attendance does not constitute cancellation. By signing this contract, the client agrees that in case of dispute or cancellation of this contract that will not be able to mitigate its losses for any less than 50% of the total contract value. If, for any reason, Lyamba Consulting decides to cancel or postpone this conference, Lyamba Consulting is not responsible for covering airfare, hotel, or other travel costs incurred by