

## TECHNICAL COMMITTEE – WATER REUSE

**Date: Wednesday 6 August**

**Time: 12.00 pm – 13.30 pm**

### MINUTES: TECHNICAL COMMITTEE – WATER REUSE

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**Present:**

<b>Phil Barnard</b>	<b>Chandlers (Chair)</b>
<b>Kevin Reed</b>	Graf UK (Vice Chair)
<b>Kemi Adeyeye</b>	WATEF Coordinator
<b>Suzy Armsden</b>	WATEF Administrator
<b>Alison Maydom</b>	DEFRA
<b>Donna McInnes</b>	DEFRA
<b>Angela Wallis</b>	Environment Agency
<b>Mike Lee</b>	Energy Team
<b>Daniel Goodwin</b>	Cranfield University
<b>Hamilton Scanlon</b>	Reaqua Systems
<b>Matthew Foster</b>	Severn Trent

**Apologies:**

<b>Daniel Clark</b>	<b>CC Water</b>
<b>Andy Wilson</b>	Scottish Water
<b>Phil Henry</b>	Polypipe
<b>Neil Pendle</b>	Waterscan
<b>Sarah Mukherjee</b>	Water UK

**Welcome & Introductions**

Phil Barnard welcomed everyone to the meeting - he has worked in water efficiency for some time and is Chair of the Technical Committee. Kevin Reed is Vice Chair.

Everyone introduced themselves:

Phil Barnard – introduced himself as Head of Sustainability at Chandlers. Experience in water efficiency and conservation – eco home builds – sustainable homes – Part G of building regs. Sustainability now larger part of company – also expanding into bio mass

Kemi Adeyeye – Coordinator of Watef Network and Senior Lecturer and Researcher at University of Brighton

Donna McInnes – DEFRA – has replaced Will Harte in the Water Efficiency team who has been seconded to another area for a few months.

Alison Maydom – DEFRA – heads up Water Efficiency team – exciting times for water reuse – happy to be part of Technical Committee

Angela Wallis – Environment Agency – responsible for water resource demand management and forecasting. Works closely with DEFRA particularly on rainwater harvesting. Keen to understand recent developments and how to make use of technology

Daniel Goodwin – Cranfield University – he is a post-grad in engineering who is sponsored by Thames Water and works mainly at their Old Ford site researching into waste water re-use, aspects of governance and looking at aspects of perception of waste water re-use.

Hamilton Scanlon – director of Reaqua Systems who design and manufacture greywater reuse systems for domestic purposes. Product launched about one year ago at Eco Build 2013 – selling in UK and Belgium

Kevin Reed – Specification Manager for Graf UK – manufacturers of storm and rain water harvesting systems – they also install and maintain these systems

Matt Foster – Severn Trent – (standing in for David Essex) – worked closely with Doug Clark on Water Efficiency team – now looking to push pilot schemes forward

Mike Lee – Water Services Manager – Energy Team UK – energy consultants with over 800 clients. They introduced water services to their client base in May 2013 – Mike's responsibility is to build up that side of the business – there are opportunities for greywater recycling & also rainwater harvesting. His responsibilities lie in presenting opportunities for water re-use to their clients.

Suzy Armsden – WATEF Network administrator responsible for day-to-day administration of network

### ***Technical Committee Overview***

Phil Barnard reviewed the objectives within each theme –

- Policy and Standards
- Building and Planning
- People and Communities
- Service Delivery and Innovation
- Technological Innovation

### **Terms of Reference**

- Each committee will consist of registered members – registration is free and members should be encouraged to join committees
- Each committee will nominate a chair – the Technical Committee has nominated Phil Barnard as Chair and Kevin Reed as Vice Chair – they will liaise amongst committee members and the WATEF networks' team.
- Each committee to operate within the terms and conditions of the WATEF network
- Each committee to operate within the realms of their subject and the annual theme of the WATEF network
- They should seek authorisation and operate within agreed budgetary limits
- They should liaise with the WATEF network team to deliver its annual outputs in a timely and efficient manner. They should send committee members to the annual WATEF conference to disseminate their outputs.

## ***Scope of Activity of Technical Committee***

### ***Technical Committee Scope of Activity***

1. Water Re-Use Codes and Standards –Phil Barnard stated” the main issue is the uneven balance of codes and standards – main issue drawn from Water Re-use event in April”  
Alison Maydom stated” it’s clear that the codes and standards are not working well in particular there are barriers around rainwater harvesting and greywater recycling. Need to conduct short mapping exercise and look more deeply into these and how we can address them”  
Hamilton Scanlon stated that” there are standards – a document which originates from NSF International – where they have mapped water quality requirements – these standards relate to water quality standards where there is discharge into rivers. These are high standards. Committee should review water quality standards to ensure appropriate”  
Mike Lee stated “what is the definition of Water Reuse and can it be defined more clearly – for instance does it involve effluent re-use?”  
Alison Maydom – what we are talking about is greywater recycling  
Donna McInnes – will circulate information on effluent re-use  
Phil Barnard/Kevin Reed – we often get asked whether effluent can be re-used – this is very much a grey area. Clarification is needed on what can and can’t be done.  
Rainwater harvesting is category 5 yet quality requirement for Rainwater harvesting is not as stringent as for greywater recycling  
Kemi Adeyeye – easiest way to define is greywater re-use and rain water recycling  
Daniel Goodwin – at Thames Water site in Stratford its referred to as waste water or black water reuse. Sewage water reuse is referred to as waste water reuse  
Phil Barnard – we need to get definition right  
Kemi Adeyeye – should we include SUDS  
Hamilton Scanlon – some US states deem rainwater as Government property & therefore you are not allowed to re-use it  
Alison Maydom – can **Kemi/Phil come up with a definition please?**  
Daniel Goodwin – there is a definition in WRAS guide. Anglian Water also produced a [document](#)

### ***Water Reuse Technologies – Costs and Maintenance***

2. Alison Maydom : we need an updated assessment of costs – Angela Wallis to look through EA report and look at costs particularly carbon costs. Generally energy used in building with water reuse technologies installed are higher than those of a building with none installed. Angela Wallis – would like to do this – it would be good to put together a report looking at new information, include systems information from manufacturers and getting partners to work with however no budget available currently

Daniel Goodwin – there is research available no sure how much of it in public domain – he **can provide more information**

Kevin Reed – important that installation is done properly – in past 5 years energy usage and demand has gone down considerably – systems are more cost effective

Hamilton Scanlon – can add real data in terms of energy costs and water savings available

Mike Lee – what about gravity fed RWH systems – these are considerably less in terms of maintenance and energy costs

Matt Foster – Severn Trent have been working with the University of Exeter on this and have considerable amount of data

### ***Information Sharing and Awareness***

Phil Barnard: this is an important point – how can we increase awareness?

Daniel Goodwin: via Cranfield University and Thames Water there was some public research undertaken which shows that all levels of customer are involved with running water reuse systems from facilities managers to domestic customers

Hamilton Scanlon: people don't know the difference between greywater recycling and rainwater harvesting – general level of awareness is bad

Phil Barnard: The Water Label system should help in showing people how systems work and why they are cost effective

### ***Uptake:***

Phil Barnard – need for awareness is key factor

Kevin Reed – in order to help promote rainwater harvesting it should be linked to SUDS – its essential people look at storm water management – cost benefit too

Hamilton Scanlon – awareness – there is a big difference between the general public and say housing developers who are more aware of what is available for sustainable builds. We are supporting scheme with developers where return on investment can be achieved in less than 3 years also added value to the property

Kemi Adeyeye – results of survey showed that with knowledge people can make informed choice – if they are knowledgeable about a product they are more likely to take it on board

Hamilton Scanlon – comparison between water rates paid in Southern England and say Thames Water area – where Thames Water cheapest. DEFRA/ECA scheme – does not apply to domestic customers – maybe get zero tax threshold for greywater recycling products?

Alison Maydom – unfortunately this could not happen due to budget constraints

Mike Lee – how about metering?

Daniel Goodwin – how about displaying benefits?

***Criteria for Presentation:***

Brief discussion about criteria for presentation - members encouraged to go onto Water Reuse forum discussion board

***Future meetings:***

Phil Barnard/Kevin Reed suggested sandpit meeting prior to conference on 28 August – venue either Lewes (Chandlers) or Graf UK (Banbury) Suzy Armsden to circulate to members to gauge responses – suggested start time 10.00 am