INVITATION TO REGISTER

MONDAY 9th NOVEMBER
Site visit to Davyhulme Wastewater Treatment Works

TUESDAY 10th NOVEMBER
- Thermal Hydrolysis Process
- Bioeconomy and Energy Recovery
- P-Recovery
- Anaerobic Digestion
- UK Nutrient Platform

WEDNESDAY 11th NOVEMBER
- Digestate and Biosolids
- Sidestream Processes
- Dewatering and Drying

"...Well organized, held in a great and convenient venue, and have a consistently high technical level of papers based on latest and cutting edge technologies and ideas..."

Technical Director, AECOM

"...I believe the Biosolids conference is the best technical event in Europe related to Sludge..."

Technical Director, Veolia Water Technologies

10% DISCOUNT IF YOU REGISTER BEFORE 30th SEPT. USING CODE CIWM10
SITE VISIT TO DAVYHULME WASTEWATER TREATMENT WORKS
11.45 – 15.15 (2 tours within this time)

Davyhulme is United Utilities’ (UU) largest wastewater treatment plant (352 Mld), serving a combined domestic and trade effluent load equivalent to 1.2 million people. It’s a crucial part of UU’s infrastructure in one of the most densely populated areas in Britain.

The site is also a major part of UU’s sludge treatment and disposal strategy. The site processes 90,000 tonnes per annum (indigenous sludge and from 7 feeder sites), and the thermal hydrolysis and anaerobic digestion plant produce enhanced treated biosolids. CHP engines fuelled by biogas generate electrical energy for the site.

Pre-construction work is already underway for the AMP6 WFD Modernisation Project at Davyhulme, which will deliver a new inlet works and modern nitrifying activated sludge plant as well as upgrades to existing infrastructure. Due to be completed in 2018, the new works will produce a better quality of treated wastewater being returned to the Manchester Ship Canal to meet demanding new environmental discharge constraints and ensure that the treatment works will continue to meet the needs of the growing Manchester population.

The site visit is free of charge, but places are limited. If you would like to join a tour please tick the box on the registration form. Transport will be provided from Manchester City Centre.

TUESDAY 10th NOVEMBER

KEYNOTE PAPER
Where will the next 20 years take us?
Barber, B., AECOM

THERMAL HYDROLYSIS PROCESS
Innovative mixing and separation unit of sludges results in cost effective continuous Thermal Hydrolysis Process (cTHP)

How to switch successfully from conventional to THP digestion?
Masse, A-L.1, Maclaren, J.2, Thames Water, MWH

A Practical Design Guide for Commissioning of THP Digestion
Fountain, P., Macedo, F., Shana, A., Thames Water

THP Organic Load ramping up strategy based on Oxford THP experience
Macedo, F.1, Fountain, P.1, Morris, D.2, Symonds, D.1, Thames Water, AECOM/Kier

TREATMENT OF WAS with Thermal Hydrolysis and Anaerobic Digestion
Williams, T.O., Burrowes, P., Fries, K., Newbery, C., Whitlock, D., CH2M, USA

The impact of Intermediate Thermal Hydrolysis Process and conventional Thermal Hydrolysis Process on biochemical composition during anaerobic digestion of sewage sludge
Shana, A.1, Ouki, S.2, Asaadli, M.1, Pearce, P.1, Thames Water, University of Surrey, SAD Technologies Ltd

East London THP commissioning and laboratory investigations
Perrault, A.1, Rus, E.1, Fountain, P.1, Merry, J.2, Thames Water, Imtech

BIOECONOMY AND ENERGY RECOVERY

The economic value of co-digestion
Woods, P., Sydney Water, Australia

Identification of Sewage Sludge Co-Digestion Limits with Highly Biodegradable Co-Substrates
Manzano, J.1, Seijas, L.2, Perez, A.1, Crespo, I.2, Garcia, R.3, Sudrez, J.1, Arespacochaga, N.1, Bouchy, L.4, Cetaqua, Centro Tecnológico del Agua, Aquambiente, Canal de Isabel II Gestión, Aqualogy UK

Full Scale Advanced Energy Recovery from Sludge – A Practical Example
Mills, N.1, Lucy, M.2, Maclaren, J.3, Collins-Thomas, M.4, Bouchy, L.2, Thames Water, Aqualogy, MWM, EPI

A Comparison of Biogas Usage Options - CHP, Turbines or Gas to Grid
Jolly, M., Knight, G., Polo, C., Black & Veatch
Wwtp Amersfoort (NL): conversion into an energy and nutrient factory
Geraats, B., Eliquo Water & Energy B.V

Cultivation of Microalgae in Urban Wastewaters for Sustainable Biofuel Production and Wastewater Treatment
Nirmala, K., New Mexico State University, USA

Scotland and the Bio-Economy
Golden, M., Zero Waste Scotland

P-RECOVERY

Bio-struvite production in sludge dewatering liquors
Simoes, F.1, Rosa-Fernandes, C-R.1, Vale, P.2, Stephenson, T.1, Soares, A.1, 1Cranfield Water Science Institute, 2Severn Trent Water Ltd

Phosphorus plant availability in sludge is much more than a simple solubility analysis
Hansen, B.1 and Grönfors, O.2, 1Kemira Kemi AB, 2Kemira Oyj

Nutrient Recovery in Anaerobic Digesters to Control Struvite Formation in Downstream Processes
Ndarm, E.N.1, Graham D.W.1, Moore, A.2, 1Newcastle University, 2Northumbrian Water Ltd

WASSTRIP® optimisation at Slough Sewage Treatment Works
Lycke, D.1, Britton, A.1, Kleeman, R.2, Mills, N.2, 1Ostara, 2Thames Water

Comparison of Phosphorus Recovery from Pyrolysis & Incineration Residues
Kleeman, R.1,2, Chenoweth, J.1, Clift, R.2, Germain-Cripps, E.2, Morse S.1, Peace, P.2, Saroj, D.1, 1Centre for Environmental Strategy, University of Surrey, 2Thames Water, 3Department of Civil and Environmental Engineering

Phosphorous Recovery in a Circular Economy
Godley, A.1, Wise S.1 and Conlan K.2, 1Ricardo, 2Cascade Consulting

ANAEROBIC DIGESTION

How Lime Pretreatment Improves Your Biogas Yield
Heiszwolf, J.1, Dobbe, R.2, Thompson, D.3, 1Lhoist Business Innovation Centre, Belgium, 2Lhoist Western Europe, the Netherlands, 3Lhoist Northern Europe, UK

First aid at digester instability - Kick dose of trace elements
Nilsson, B., Olsson, H., Kemira Kemi AB

Towards a new predictive model for foaming in anaerobic digesters
Kanu, I.R., Aspray, T.J., Adeloye, A.J., Heriot Watt University, Edinburgh

The Wanlip Sludge Project: from optioneering to commissioning of a new 28,000t/a acid phase digestion plant
Lewin, L.1, van Brummelen, S.2, Luck, R.3, 1MWH, 2Costain, 3Severn Trent Water

Improving process reliability, methane production and disposal costs on AD plants accepting food waste
Sims, J., Huber Technology

High Performance Anaerobic Digestion
Pary, D., CH2M, USA

Digester Outage Management

CharactORIZATION of Biosolids from an Anaerobic Membrane Bioreactor Treating Municipal Wastewater: Impact on Membrane Fouling and Sludge Treatment
Dong, Q.1,2, Dagnew M.2, Cumin J.3, Parker W.1 and Dold, P.1, University of Waterloo, Canada, 2GE Water and Process Technologies, Canada, 3EnviroSim Associates Ltd, Canada

Specific biomethane potential of organic wastes for anaerobic digestion in the Pomeranian region of Poland
Szatkowska, B. and Paulsrud, B., Aquateam COWI, Norway

Enhanced High-Solid-Content Anaerobic Digestion Treating Waste Activated Sludge
Wu, J.1, Cao, Z.P.1, Wang, G.Q.1,2, Rehman, Z. Ur1, HU, Y.Y.1, Cheng, C.1, Zuo, J. E1, Wang, K.J.1, 1Tsinghua University, China, 2China Northwest Architecture Design and Research Institute Co. LTD., China

UK NUTRIENT PLATFORM SESSION

The session is funded by the INTERREG IVB NWE project ‘BioRefine’ promoting the development of a cross sector UK Nutrient platform for all stakeholders with interests in sustainable nutrient use and recycling, nutrient management and security and environmental impact.

The session will include a description of the vision of the Platform, setting out some of the aspirations identified at the recent ‘road mapping’ workshops. It will also explain how it will interact with relevant European networks dedicated to nutrient conservation and recovery.

DATES FOR YOUR DIARY

• Thermal Processes for Resource Recovery from Waste
  10th September 2015, Aqua Enviro Events Suite, Wakefield

• 9th European Waste Water Management Conference & Exhibition
  12th October 2015 - 13th October 2015, Manchester Town Hall, Manchester, UK

• FOG – Means and Opportunities
  2nd February, Wakefield

• Advances in Thickening and Dewatering Technologies to Reduce Polymer Consumption
  Early 2016, The Leeds Club, Leeds

• Innovations in Wastewater Treatment
  21st March 2016 - 23rd March 2016, University of Leeds, UK

• 11th IWA Specialist Group Conference on Wastewater Pond Technology
  21st March 2016 - 23rd March 2016, University of Leeds, UK
WEDNESDAY 11th NOVEMBER

KEYNOTE PAPERS

20 Years of Progress in Biosolids Handling and Treatment
Whippes, A.1 and Lowe, P.2, 1Pell Frischmann, 2Consultant and Conference Founder

Forty Years in the Black Stuff
Evans, T., Tim Evans environment

A Comparison of Biosolids Management between the UK and Other Global Utilities – the Effect of Externalities and Regulation
Panter, K., Eboor Ltd

DIGESTATE AND BIOSOLIDS

Digestate quality: Where does the buck stop?
Tompkins, D., Aqua Enviro Ltd

Assessing the Soil Quality and Fertility Benefits of Biosolids Applied to Agricultural Land
Nicholson F.1, Taylor, M.1, Bhogal A.1, McGrath S.1, and Withers P.2, 1ADAS, 2Rothamsted Research

Assessment of Risk to Soil Quality and Human Health from Organic Contaminants in Materials Commonly Spread on Land in Scotland
Cundill, A.1, Peters A.2, Merrington G.2, Wilson I.2, Stutt, E.2, 1Scottish Environment Protection Agency, 2Bangor University

A Fresh Perspective on Wastewater Treatment Plants (WWTPs) As Hotspots of Environmental Antibiotic Resistance
Pepper, I., The University of Arizona

From Sludge to Biosolids to Organic Fertilisers – Norway’s Experiences over the Past 20 Years
Toreis, O.1 and Whippes, P.2, 1WAR IKS, Norway, 2Pell Frischmann

Benefits and Problems Associated With Sewage Sludge Spreading to Land in Scotland – Results from an Eight Year Study
Cundill, A.1, Eber C.1, Dobbie K.1, 1Scottish Environment Protection Agency

Doing it differently: AD and composting in Scotland
Tompkins, D.1, Littleack, A.2, McKinnie, A.3, 1Aqua Enviro Ltd, 2Earthcare Technical Ltd, 3Zero Waste Scotland

Stabilization and Product Enhancement of Sludge from Wastewater Treatment Plants for Usage in Agriculture
Ajro, V., International University of Struga

Novel uses for digestate: Protected horticulture
Dimambro, M.E., Cambridge Eco Ltd

SIDESTREAM PROCESSES

A Battle to Be the Best: A Comparison of Two Powerful SideStream Treatment Technologies: Post Aerobic Digestion and ANAMMOX
Williams, T.O., Bauer, H., Johnson, T.D., Johnson, B.R., Oerkes, D., CH2M, USA

The Potential of the ANAMMOX® Process: An overview of applications and experience
Driessen, W.1, Remy, M.1, Hendrickx, T.1, Loosdrecht, van M.2, 1Paques BV, The Netherlands, 2Technical University Delft, The Netherlands

DEWATERING AND DRYING

Assessing the ultimate dewaterability of sludge
Herron, D., Aqua Enviro Ltd

Fiocformer, an Innovative Solution for Advanced Dewatering: 2 Case Studies
Bouchy, L. and Schröder, C., Aqualogy Environment Ltd

New Bucher HPS 12007 Sludge Press with Low Energy Consumption
Pinnow, D., and Huppert, M., Bucher Unipektin

Sludge Dewatering Optimisation for the CAMBI Process – Transands Case Study
Ainsworth, S., Hach Lange

One year of Bucher Press operational experience at Oxford STW
Macedo, F.1, Fountain, P.1, Huppert, M.2, Pinnow, D.2, Webb, I.1, 1Thames Water, 2Bucher Unipektin

Packaged Sludge Thickening and Dewatering
Willis, R., Huber Technology

Solids-Liquid-Gas (SLG) separation technology for sludge treatment: Results from a pilot scale trial by Anglian Water
Inman, D.1, Moreels, P.2, 1Anglian Water Services (UK), 2Orange, France

Modern Belt Drying of Sludge – Innovative Sludge and Energy Management
Heindl, A., Ostermann, S., Dür, J., HUBER SE

Innovative Cooling Solution for Biosolids
Sutherland, N. and Nix, A., Solex Thermal Science Inc., Canada

Optimised Cake Handling considerations for Sludge Reception, Storage and AAD Process Feed
Neal, M., Saxlund International Ltd

Andritz Gouda sludge Paddle Drying System (GPD) within a cement works
Weeks, M.1 and Maingay, M.2, 1Andiriz Limited, 2Andritz Gouda

How to dry sludge with no heat? Full-scale example of a sewage sludge thermal drying process combined with a cement factory
Lucy, M., Bouchy, L. Arauzo, I., Aqualogy Environment Ltd

ODOUR MANAGEMENT

Electronic Nose and Biosolids: An Assessment of Potential Applicability for Production Process Control
Romero-Flores, A.1, McConnell, LL.1, Hapeman, C.2, Ramirez, M.3, Torens, A.1, 1University of Maryland, 2USDA Agricultural Research Service, Environmental Management and Byproduct Utilization Laboratory, 3District of Columbia Water and Sewer Authority, USA

Odour Treatment with a High Efficiency Advanced Biofilter in a Large Municipal Wastewater Treatment Plant Located in the North of Spain
Bouchy, L.1 and Nadal, S.2, 1Aqualogy Environment Ltd, 2Labaqua

*NB timings and room allocations will be released in September
# Delegate Booking Form

## Delegate Details

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## Delegate Fees

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<td><strong>Student/Academics &amp; Charities</strong></td>
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## Method of Payment

- **Cheque**: Payable to AE Technology Transfer (A VAT Receipt will be sent automatically).
- **Invoice**: Please invoice for the sum of £ ………………. Purchase order number ……………………………………..

### Accounts Contact

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## Terms and Conditions:

A charge of £50 will be levied for cancellations made up to 20 days prior to the event. Cancellations after this period will be liable for payment of the full fee. Payments should be received 30 days from receipt of the invoice.

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**Please send enquiries and booking forms to:** Aqua Enviro Ltd, 8 Appleton Court, Calder Park, Wakefield, WF2 7AR

**Email:** clarehunter@aquaenviro.co.uk; **Web:** www.aquaenviro.co.uk
This year will mark the 20th anniversary of the European Biosolids and Organic Resources conference and the organisers have planned a very special event that recognizes the contributions of all the delegates over the past two decades. It will look back and review the changing landscape of biosolids over this period from the time when it was a waste requiring disposal, to the present when it is a valuable resource offering many possibilities for recovery and recycling. The theme of this will be to understand what we can discover from the past and exploit this for positive change in the future. But this is not a backward looking event and as always it is offering examples of best practice in biosolids management within Europe and highlighting potentially exciting future technologies.

Application of new technologies always brings with it problems, which in turn demand novel solutions. The next two days will offer contributions from experienced practitioners who have encountered problems and are now offering solutions to these problems. We also have a full day to explore the opportunities we can derive from our expertise in biosolids within the circular or green economy. This involves not only energy and nutrient recovery but also the application of biotechnological principles to derive a range of high-value chemical platforms. Placing biosolids within a biorefinery concept is generating a lot of interest and appears to be an exciting approach whose time has now arrived.

Once again we are returning to the Town Hall, Manchester which has provided the perfect venue for hosting the event and we look forward to seeing you there!

Nigel Horan, Conference Director – July 2015

VENUE – MANCHESTER TOWN HALL
Albert Square, Manchester, UK

The Town Hall was designed by Alfred Waterhouse, and is regarded as one of the finest examples of neogothic architecture in the United Kingdom.

The exhibition will be held in the Great Hall which is decorated with celebrated murals by Ford Maddox Brown illustrating the history of the city. The conferences sessions will take place in the impressive state rooms.

Venue, travel and accommodation details will be sent out upon registration, alternatively you can view these on the conference website www.european-biosolids.com

DRINKS RECEPTION – THE PALACE HOTEL, MANCHESTER
Monday 9th November

A welcome drinks reception will be held in the Palace Hotel bar on the eve of the conference, following the site visit to Davyhulme. All registered delegates who are arriving in Manchester that evening are welcome to join us from 7pm.

CONFERENCE DINNER – EL RINCON De RAFA, MANCHESTER
Tuesday 10th November

This year’s dinner will be held at El Rincon de Rafa Spanish Restaurant just off Manchester’s popular Deansgate. You will be treated to an authentic tapas experience in this bustling and atmospheric restaurant.

Tickets are £60 per head and guests will enjoy drinks on arrival, a selection of the finest tapas, half a bottle of wine and evening entertainment.

Please add the conference dinner to your basket upon registering at www.aquaenviro.co.uk. The Conference Dinner is a great opportunity to network with people in the industry in a relaxed atmosphere. Why not take a corporate table to entertain your guests? This is a perfect opportunity to impress your most important clients. The event is always a sell out so we encourage you to book early to avoid disappointment.

Email: franceswoodhead@aquaenviro.co.uk for further details and to reserve your table.

SPONSORSHIP & EXHIBITION

This highly regarded annual conference offers a fantastic opportunity to increase your company profile and gain brand awareness through sponsorship. We’re offering packages that will put your company at the forefront of the industry both in the lead up to, and during the conference.

Visit www.european-biosolids.com for further details, alternatively to discuss bespoke options please contact Frances - e. franceswoodhead@aquaenviro.co.uk, t. +44 (0)1924 257891

Alongside the conference is the extremely popular exhibition. Stand spaces are 3m x 2m and are on offer at £850 (+VAT) for two days (10th – 11th Nov). Exhibitors also receive 20% discount off the delegate rates.

Current exhibitors include:
Aqualogy | Veolia Water Technologies | Odournet | Evergreen Engineering | SNF | SPA Group/Lhoist | SeepeX | MSE Hiller | Bucher Unipetrol | Huber Technology | Ecoganix | Aqua Enviro | Paques BV | Ecoganix | Paques BV | 4R Group | University of Leeds/UK Nutrient Platform/Biorefinery

www.european-biosolids.com  www.aquaenviro.co.uk