Training in Biological Wastewater Treatment



"a specialist environmental monitoring service"



Aerobic Biological Treatment Processes

23rd September 2015

The Activated Sludge Process

24th September 2015

These one-day courses can be taken separately or combined as a two day course.

The requirement for training and staff updating in the understanding, management and operation of biological wastewater systems is ongoing and applies to industry and local authorities alike. Industrial wastewater discharges have long been subject to licensing under the Water Pollution Acts (1977 – 1990) and Integrated Pollution Prevention and Control (IPPC). The establishment of Irish Water will increase the emphasis on water conservation/reuse and the further enhancement of water quality in the natural environment. This is likely to result in the installation in both public and private utilities of advanced wastewater treatment technologies such as nitrification/denitrification, membrane technologies etc.

OBJECTIVES

The course will provide a basic understanding of the principles and practice of the various aerobic biological wastewater treatment processes. Some previous knowledge is desirable but not essential as this is a basic introductory course.

The principal course objectives are to provide

- an understanding of the practical design, operation and monitoring of biological wastewater treatment systems
- an appreciation of the capability of particular systems to achieve compliance with existing and likely future legislation and licensing

WHO SHOULD ATTEND

Those involved in plant operation and maintenance, laboratory analysis of wastewater parameters and in the general management, supervision and control of biological wastewater treatment plants.

OBJECTIVES

This course will introduce participants to the skills required for efficient design, operation and troubleshooting of the activated sludge process – the most widely applied technology for biological wastewater treatment. A knowledge of the basics of aerobic biological treatment processes is assumed.

The principal course objectives are to provide

- an insight into the more complex aspects of the activated sludge process
- an understanding of more recent developments, including membrane technologies, granular activated sludge and the removal of nutrients

WHO SHOULD ATTEND

Those who already have an understanding of the basics of biological wastewater treatment but wish to have a more in-depth knowledge of the design, operation and performance capabilities of the activated sludge process.

Course Tutors and Contact Details

Joe McNamee (Enterprise Environmental) Phone: 087 6488690 e-mail: joemcnamee1@gmail.com,

or visit: www.enterpriseenvironmental.com

John Kilgallon (JKENVIRONMENT LTD.) Phone: 087 2832385 e-mail: jkenvironment@eircom.net

Both formerly environmental consultants with Enterprise Ireland and its precursor organisations Forbairt/Eolas/IIRS.

PROGRAMMES

Aerobic Biological Treatment Processes

23rd September 2015

09.00 REGISTRATION AND TEA/COFFEE 09.30 PRELIMINARY TREATMENT AND **DEFINITION OF TERMS** 11.00 COFFEE/DISCUSSION 11.30 BASIC PRINCIPLES OF AEROBIC **BIOLOGICAL PROCESSES** LUNCH 13.00 14.00 TREATMENT PLANT DESIGN WITH WORKED EXAMPLE **COFFEE** 15.15 15.30 PLANT MONITORING AND **CONTROL STRATEGIES** DISCUSSION AND CLOSE 16.30

The Activated Sludge Process

24th September 2015

| 09.00 | REGISTRATION AND TEA/COFFEE |
|-------|---|
| 09.30 | PROCESS DESIGN AND VARIATIONS (SBR, MEMBRANES, P REMOVAL AND GRANULAR SLUDGE PROCESSES) |
| 11.00 | COFFEE/DISCUSSION |
| 11.30 | BIOLOGICAL NITRIFICATION AND DENITRIFICATION |
| 13.00 | LUNCH |
| 14.00 | TROUBLESHOOTING AND PROBLEM- SOLVING METHODOLOGIES |
| 15.15 | COFFEE |
| 15.30 | MICROBIOLOGICAL ASPECTS AND MICROSCOPIC EXAMINATION |
| 16.30 | DISCUSSION AND CLOSE |

VENUE: City West Hotel Conference & Event Centre, Naas Road, Saggart, Co Dublin.

For directions, parking, accommodation etc., please see www.citywesthotel.com

FEES: €330 per course, including documentation, lunch and refreshments. For those wishing to

attend both courses, a reduced combined fee of €495 will apply. VAT is not chargeable.

BOOKING FORM

By Post/Fax to: Joe McNamee, Enterprise Environmental, Unit 1D, M4 Interchange Park, Celbridge, Co. Kildare. By e-mail (with details as below) to: joemcnamee1@gmail.com Phone/Fax: 01 6279935

| Required Course (Please | e indicate): Aerobic Biological Treatment Processes (23 rd September 2015) The Activated Sludge Process (24 th September 2015) | | | |
|--|---|--|--|--|
| Payment Method: | Invoice (Purchase Order required) for sum of ϵ | | | |
| Terms and Conditions: No fee will be charged for cancellations made up to 10 days prior to the event (payments will be refunded). Cancellations after this period will be liable for the full fee (substitutions will be allowed). In the event that the course has to be cancelled, all course fees will be refunded. Enterprise Environmental and JKENVIRONMENT LIMITED will accept no liability for any additional costs, such as hotel bookings etc. | | | | |
| FIRST NAME | SURNAME | | | |
| ORGANISATION | POSITION | | | |
| ADDRESS | | | | |
| PHONE | e-mail | | | |

Joe McNamee



"a specialist environmental monitoring service"

John Kilgallon



Two One-day Courses on Biological Wastewater Treatment

23rd & 24th September 2015, City West Hotel Conference & Event Centre, Saggart, Co Dublin.

The requirement for training and staff updating in the understanding, management and operation of biological wastewater systems is ongoing and applies to industry and local authorities alike. Industrial wastewater discharges have long been subject to licensing under the Water Pollution Acts (1977 – 1990) and Integrated Pollution Prevention and Control (IPPC). The establishment of Irish Water will increase the emphasis on water conservation/reuse and the further enhancement of water quality in the natural environment. This is likely to result in the installation in both public and private utilities of advanced wastewater treatment technologies such as nitrification/denitrification, membrane technologies etc.

The courses are being jointly presented by Joe McNamee (Enterprise Environmental) and John Kilgallon (JKENVIRONMENT LTD.).

Please find our Brochure and a client list attached. We would be obliged if you would circulate these details to those in your organisation who might be interested in attending.

Course Tutors:

John Kilgallon (JKENVIRONMENT LTD.): Chemical Engineer with many years experience in the Environment Unit of IIRS, Eolas, Forbairt and Enterprise Ireland. Left Enterprise Ireland in December 2006 and established JKENVIRONMENT LTD. Specialises in Wastewater Treatment, Waste Minimisation, Eco-efficiency and Training, together with a range of environmental activities.

Contact Details: Phone: 087 2832385 e-mail: jkenvironment@eircom.net

Joe McNamee (Enterprise Environmental): Environmental analyst and consultant in the area of waste water treatment (operation and troubleshooting). Many years experience with Dublin County Council, IIRS, Eolas, Forbairt and Enterprise Ireland. Left Enterprise Ireland in March 2007 and established Enterprise Environmental. Provides a range of Specialist Environmental Monitoring Services, Consultancy and Training.

Contact Details: Phone: 087 6488690 e-mail: joemcnamee1@gmail.com

Web: www.enterpriseenvironmental.com

Joe McNamee



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John Kilgallon



Client List

Previous Presentations of Similar Courses – by John Kilgallon and Joe McNamee

| 2015 | ABP Cahir (on-site course) |
|------|---|
| 2015 | Croke Park Conference Centre (Feb) Training in Biological |
| | Wastewater Treatment. |
| 2014 | Croke Park Conference Centre (Feb) Training in Biological |
| | Wastewater Treatment. |
| 2013 | ABP Cahir (on-site course) |
| | Croke Park Conference Centre (Feb) Training in Biological |
| | Wastewater Treatment. |
| 2012 | Croke Park Conference Centre (March) Training in Biological |
| | Wastewater Treatment. |
| | Glanbia, Ballyragget |
| | Environmental Protection Agency |
| | Lakeland Dairies, Bailieboro |
| 2011 | Millipore Ireland Ltd, Carrigtwohill. |
| | Croke Park Conference Centre (Feb and October), Training in |
| | Biological Wastewater Treatment, |
| | Kildare Co Co, Training in Urban Wastewater Treatment. |
| 2010 | Croke Park Conference Centre, Training in Urban Wastewater |
| | Treatment. |
| 2009 | Shannonside Milk Products, Ballaghaderreen. |
| | Environmental Protection Agency. |
| 2008 | Glanbia, Ballyragget. |
| | Environmental Protection Agency. |
| 2007 | Environmental Protection Agency. |