Lymm Hotel, Warrington, Cheshire. WA13 9AQ

# Sewage Pumping Station Design

This one day course will cover the essential requirements for designing Sewage Pumping Stations. The design of sewage pumping stations provides unique challenges in addition to those normally encountered in the water industry. Specific issues such as the nature and volume of solids content in the flow, sump design and particular operational approaches must be taken into account. By the 1st October 2016 all Water Companies must have assumed responsibility for private sewage pumping stations (PDAS regulations).

An understanding of the particular requirements for the design of sewage pumping stations will be required by all those involved in the process and/or dealing with any issues arising. The course will begin by covering the general requirements for pumping station design including liquid properties, different types of pumps & their characteristics, system curves, selecting the right pump for the system and cavitation. All topics will have an emphasis on sewage pumping design aspects.

The course will continue to provide more detailed coverage to the requirements for sewage pumping stations including sump design, how to mitigate solids deposition, generating system curves at site, design and operation of dry and wet wells and duty/assist/standby pumping. The course is intended to provide those who are required to design pumping stations, approve designs submitted by others or advise on possible improvements to existing systems with the skills they need.

## **OBJECTIVES**

- Understand how liquid properties affect pump selection & performance.
- Become familiar with the characteristics and construction of Centrifugal & Positive Displacement pumps.
- Learn how to design sewage pumping stations and produce system curves.
- Learn about sump design requirements for sewage pumping stations, how to set start / stop levels keep wet wells clean.
- What to look out for when adopting a small sewage pumping station.

### PROGRAMME

- The material will be presented by means of a series of lectures, demonstrations and practical exercises.
- No prior knowledge of pumping station design is required
- The course will include a presentation on the optimisation of pumping stations.

### WHO SHOULD ATTEND

• Engineers who need to design sewage pumping stations, whether as part of their daily work or only occasionally.

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- Engineers and others who are called upon to assess designs submitted for approval.
- Project Managers & Procurement Professionals who need to be aware of the issues.
- Those who may become responsible for the design or operation of sewage pumping stations including those inherited as part of the PDAS regulations.

For more information and to discuss your training requirements contact: Jim Eaves (call +44 (0)7968 707 753 or email <u>jim.eaves@arcadis.com</u>)

#### To reserve your places contact:

Karen Bridgeman (call +44 (0)1925 84 3512 or email karen.bridgeman@arcadis.com)

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