

## E.On onsite Sewage Treatment Plant (Ratcliffe-on-Soar)

Located in Nottinghamshire, E.On's Ratcliffe-on-Soar facility is one of the most efficient coal fired power stations in the UK. With a total generation capacity of 2,000MW it produces enough electricity to meet the needs of approximately 2 million people.

In March 2008 WPL were contacted by E.On to enquire about a replacement sewage treatment solution to serve personnel located at the site's Technology Centre and Main Power Station.



The Power Station does not have the benefit of mains drainage to a Water Company sewage treatment works and therefore all waste water generated on site requires treatment before being discharged to the adjacent watercourse.

### The WPL Solution

An existing "on site" sewage treatment plant was being considered for replacement due to the age of the assets but also the need to accommodate higher projected numbers of personnel for decades to come.

WPL met with E.On and listened to the company's requirements before discussing any proposed solutions. WPL understood that it was important to E.On Engineers to fully understand their requirements and offer a bespoke solution to meet the company's requirements.

Several treatment options were proposed before E.On chose an "above ground" solution. Criteria which steered the company Engineers with their decision making was WPL's simplicity of design of an above ground installation and ease of plant operation.

The automated plant design incorporated:

- ☑ Lamella plate separators for primary and tertiary settlement.
- ☑ Submerged Aerated Filters (SAF) for secondary (biological) treatment.
- ☑ Sludge storage/treatment plant for extended sludge holding and minimising the requirement for off site tankering.
- ☑ A walk in style kiosk to house ancillary equipment including control panel and blowers.

The plant is designed to achieve stringent Environment Agency consent standards for Biochemical Oxygen Demand, Suspended Solids and Ammonia.

During pre, present and post project work, WPL supported E.On with their sewage treatment plant replacement scheme. WPL staff listened to the company's "wants and needs" before supplying them



with a bespoke solution. At each stage individual key staff from WPL supported the design, delivery and installation of the plant.

WPL's capability in providing wastewater solutions to clients was clearly demonstrated with this project. E.On have been provided with facility that will meet their requirements for decades to come.

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WPL Ltd is an internationally-recognised leader in the design, manufacture and supply of standardised and bespoke environmental sewage, wastewater and commercial kitchen grease management process solutions.

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