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Visit to Hall Water Treatment Works 9th October 2019

Anglian Water is tasked with providing 1.2 billion litres/day of clean drinking water to 4.3 million customers in the East of England, one of the driest areas of the UK and one which also grows 25% of UK vegetable crops. The population is expected to grow by a third by 2030 and so to meet predicted demand, AW needed to increase the amount of available drinking water. Historically in the region, raw water has been taken from



water quality standards. Hall Water Treatment plant has been built over recent years utilising this new technology in order to augment the water supply across Lincolnshire.



boreholes for treatment but due to a reducing water table level, increasing this was not possible and so a new process had to be developed, to treat water abstracted from the River Trent to meet drinking

A group of 20 were greeted by Site Manager, Jon Pawson and Engineer, Scott Hayward who provided an introduction and then led detailed guided tours through the treatment processes. They started with taking us to the top of six large tanks where the first stage purification takes place using granular activated carbon which is made from coconut shells. The water passes to large buffer tanks prior to the second stage of purification in

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added which ensures the water remains disinfected throughout its distribution journey to us all. At the time of our visit, work was just being finalised to allow addition of a very small dose of fluoride to the water, to protect our teeth.

a Submerged membrane plant. The water filtrate from this passes to a Holding Tank prior to the third stage of purification, Advanced oxidation for pesticide removal using UV light and Hydrogen Peroxide treatment - this is a key stage to remove chemicals which are applied to crops by farmers and which wash off the fields into the rivers during rainfall. Following this the water passes over granular activated carbon again to improve its taste and odour. It then passes through a second UV treatment which disinfects the water prior to addition of a very small dose of phosphoric acid which prevents lead take up if it passes through lead pipes en-route to users. Finally a very small dose of bleach is

Throughout the visit, our guides gave us detailed information and amusing and political anecdotes. Who would have



thought what a lot of effort goes into ensuring that something we take for granted, our simple glass of water is ALWAYS so pure and refreshing.

John Saynor