

Question 27 (5 marks)

Describe the physical and chemical processes needed to purify and sanitise a town water supply.

5

The water is pumped from a reservoir into an aerator where it receives a dose of chlorine and Al. The chlorine kills the bacteria and organisms. The water then enters a clarifier where the Al causes flocculation. The flocculate settles to the bottom of the tank. The water then is sent through a sand filter. Coal is used to de-odourise the water and soda ash is also added to assist pH levels. When the water passes through the sand filter it then receives a last dose of chlorine to ensure ~~no~~ no ~~contamination~~ contamination before it is pumped to the town.