Wastewater treatment plants as a source of microbial pathogens in receiving wa

Wastewater treatment facilities have become sin quo non in ensuring the discharges of high quality wastewater effluents into receiving water bodies and consequence, a healthier environment. Due to massive worldwide increases in human population, water has been predicted to become one of the scarcest resources in the 21st century, and despite large advances in water and wastewater treatments, waterborne diseases still pose a major threat to public health worldwide. Several questions have been raised on the capacity of current wastewater treatment regimes to remove pathogens from wastewater with many waterborne diseases linked to supposedly treated water supplies. One of the major gaps in the knowledge of pathogenic microorganisms in wastewater is the lack of a thorough understanding of the survival and persistence of the different microbial types in different conditions and environments.

This therefore brings to the fore the need for a thorough research into the movement and behavior of these microorganisms in wastewaters. In this review paper we give an overview of wastewater treatment practices with particular emphasis on the removal of microbial pathogens.

Key words: Wastewater, treatment plants, microbial pathogens, watershed.