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Study on characteristics and removal of NOM by pre-coated filtration

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ABSTRACT

Natural organic compounds are a mixture of various chemical structures with different properties that are responsible for color and taste of water, and contribute to the formation of disinfection by-products. Currently, there is a great focus on the use of membranes in technologies related to water treatment due to their high treatment efficiency but the pretreatment is necessary to prevent fouling. In recent years, a number of studies have been conducted in order to minimize fouling. And since the feed quality can have a significant impact on fouling, in this study we have evaluated the components of NOM by characterizing the feed water and water treated by pre-coated absorbent, using spectrophotometric analysis.

Keywords: HAOPs; Membrane fouling; Natural organic matter; PARAFAC; Pre-coat filtration

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