

Future perspectives For the successful commercialization of CNT technology, significant improvements are necessary, such as cost reduction and large-scale production of these materials. Studies should focus on confirming the effectiveness of these nanomaterials and nanocomposites with natural water and wastewater samples to include effects on relevant environmental factors. Pilot studies involving contaminant removal through CNTs nanocomposite membrane filtration are already in the developmental stage and may require some time to determine its cost-effectiveness and to provide a benchmark in contrast to integrated AC adsorption-microfiltration or other existing technologies for full-scale PPCPs removal [9]. Current literature on the toxicity of CNTs to terrestrial and aquatic life is inconsistent and contradictory and therefore warrants further research.