

## Abstract

The wastewater recycling is proving to be an absolute necessity for dealing with ever growing needs of the precious liquid (water), so several recycling techniques are used and it is very difficult for the decision-makers to choose between those who has the least influential environmental impacts on the environment. The environmental performance of the various water recycling technologies are compared on the basis of the associated potential environmental impacts by using the life cycle analysis, which allows us more the comparison and the selection of appropriate technologies and to identify opportunities for improvement of environmental performance of the water recycling process. For the identification of the environmental impacts we used the Simapro-6 software life cycle assessment (LCA). Software provides you with a professional tool to collect analyze and monitor the environmental performance of products and services. We analyze complex life cycles in a systematic and transparent way, following the ISO 14040 series recommendations. The results of life cycle assessment are discussed in detail in the present paper and the potential domains of improvement are identified. The relevance of the life cycle assessment use in the framework of the treatment of wastewater is discussed and the limits of this method in this field are listed