Changes of hydrocarbon and oil fractions contents in oily waste treated by different methods of bioremediation

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Abstract

In this study content of oil fractions in wastes produced was estimated during oil extraction and transportation. It was demonstrated, that these wastes differ in their fraction content: either aromatic or saturated hydrocarbons are dominant. In modeling of bioremediation processes by means of composting with soil, compost and addition of selected microorganisms, different speed of degradation of different oily fractions was revealed. In case of low final content of oil, concentration of asphaltens and resins, in case of uncompleted degradation of hydrocarbons concentrations of asphaltens and aromatic hydrocarbons became higher.

Keywords

Hydrocarbon fractions, Oily wastes, Remediation