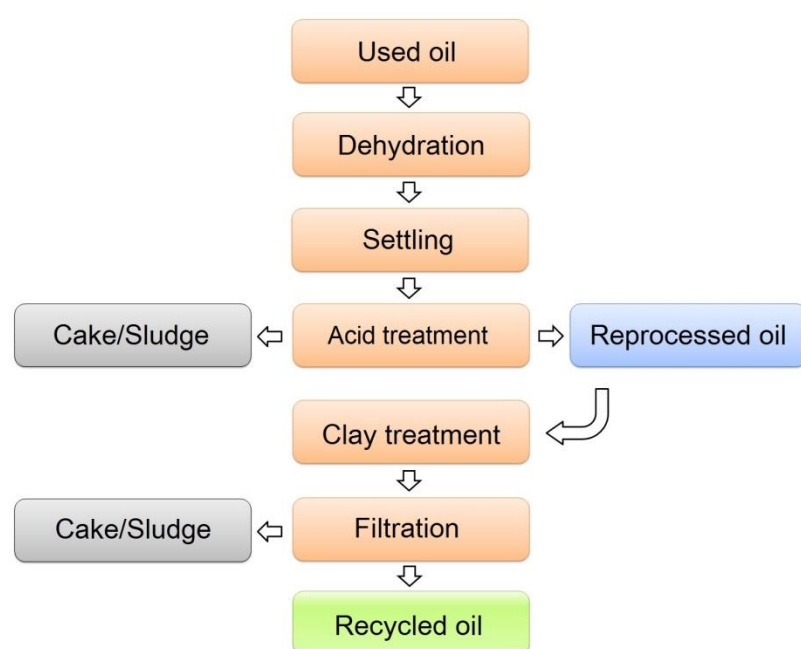


# Study on the recycling methods of used engine oil

*student project*

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The study presents an overview of the main technologies for recycling used engine oil, as well as a comparative analysis of the impact of these technologies on the properties of recycled oil. The aim of this research is to highlight the importance of proper management of this type of hazardous waste.



Block diagram of the acid/clay recycling method



Overview of the used engine oil recycling process

The best known such methods are: acid/clay treatment, solvent extraction, vacuum distillation and clay treatment, vacuum distillation and hydrogenation process and membrane filtration technology. Each of these techniques has a number of advantages and disadvantages, from an economic point of view as well as environmentally, depending on its specifics. The acid/clay method is no longer encouraged globally because it generates toxic waste, but other technologies (solvent extraction and vacuum distillation) are developed industrially in different countries and are in a continuous process of improvement.

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