

Wastes of Oil Drilling: Treatment Techniques and Their Effectiveness

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Abstract : In Hassi-Messoud's oil industry, the systems which are water based (WBM) are generally used for drilling in the first phase. For the rest of the well, the oil mud systems are employed (OBM). In the field of oil exploration, panoply of chemical products is employed in the drilling fluids formulation. These components of different natures and whose toxicity and biodegradability are of ill-defined parameters are; however, thrown into nature. In addition to the hydrocarbon (HC, such as diesel) which is a major constituent of oil based mud, we also can notice spills as well as a variety of other products and additives on the drilling sites. These wastes are usually stored in places called (crud wastes). These may cause major problems to the ecosystem. To treat these wastes, we have considered two methods which are: solidification/ stabilization (chemical) and thermal. So that we can evaluate the techniques of treatment, a series of analyses are performed on dozens of specimens of wastes before treatment. After that, and on the basis of our analyses of wastes, we opted for diagnostic treatments of pollution before and after solidification and stabilization. Finally, we have done some analyses before and after the thermal treatment to check the efficiency of the methods followed in the study.

Keywords : wastes treatment, the oil pollution, the norms, wastes drilling

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