EFFICIENT TECHNOLOGY FOR THE TREATMENT OF INDUSTRIAL WASTEWATER FROM HYDROCARBONS AND MECHANICAL IMPURITIES

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Abstract

In our modern era, environmental protection, including the rational use of water sources and their protection against pollution, is of particular importance. The protection of water resources is interdisciplinary and complex, as it deals with many problems. The most important of these is preventing their pollution by various industrial wastes and eliminating the consequences of the pollution. The research aims to develop a more compact, simple and efficient thin-layer oil trap design in terms of structure and operation. The article summarizes the practical experience in the development of small-sized, easy-to-operate and more efficient thin-layer oil traps for the treatment of industrial wastewater polluted by oil and petroleum products, and the determination of their technical parameters. The scientific novelty of the study lies in the application of hydraulic and technological parameters of the created structures of thin-layer oil traps, the results obtained are scientifically substantiated, and the relevant recommendations for the design of oil traps are prepared. They also allow the calculation of thin-layer oil traps in a wide range of process parameters according to the requirements for the degree of water treatment.

Key words: construction, equipment, fluid flow, hydrocarbons, thin-layer oil trap

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