

TECHNOLOGY OF BIOLOGICAL PURIFICATION OF OIL-CONTAMINATED ROAD SURFACES

The relevance of the problem: Oily waste poses a significant danger to the natural environment, being a source of pollution of soils, groundwater and surface waters, and various concreted surfaces. Contamination of concrete and asphalt occurs in industrial zones of oil producing and processing enterprises, on railway overpasses when loading finished products and raw materials, at service stations and gas stations. Petroleum products, penetrating into the thickness of concreted surfaces, with an increase in ambient temperature, according to the chromatographic effect, begin to rise up through cracks and evaporating, create a gas-air regime saturated with volatile gaseous petroleum products. This phenomenon can serve as a dangerous source of sparking, which can lead to negative consequences in enterprises with increased fire risk.

The purpose of the project: the use of biotechnological methods for cleaning oil-contaminated surfaces.

Advantages over analogues: currently, various detergents are used to clean oil-contaminated concretes. The proposed method uses environmentally friendly biotechnological methods.



Developers: a team of authors led by Doctor of Biological Sciences, Professor Issayeva A.U.

It comes from him↓

Commercialization of the results. The technology of cleaning oil-contaminated concrete and asphalt is offered for road services, service stations, gas stations.

It comes from him↓

Patent protection. There is 1 patent for the invention of the Republic of Kazakhstan.

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1	Способ культивирования штаммов микроскопических грибов.	Инновационный патент РК №21215 2008/0468.1 от 21.04.2008, 15.05.2009, Б.№5	Исаева А.У., Бишимбаев В.К., Макулбекова М.М.
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