

Innovative Technology for Restoring Disturbed & Oil-Contaminated Lands

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key words

bentonite, oil and petroleum product spill, remediation works, phytotesting

According to the research results, the effectiveness of bentonite clays as part of the Bio-HMC complex for the reclamation of oil-polluted lands has been confirmed, in which bentonite clays from Tagansky and Kaibalsky deposits with a high content of montmorillonite are used as a mineral component. The stabilizing effect on humus components is expressed in maintaining their concentration at the level of control values due to the formation of various bonds between humates and rock minerals. For a more accurate assessment of the density of multicomponent mixtures, it is necessary to additionally perform phytotesting of the substrate. The highly effective combined action of humic acids together with bentonite makes it possible to reduce the scale of environmental pollution, ensure their neutralization and disposal for further use in the reclamation of disturbed and oil-contaminated lands.

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