

Establishing the Environmental Safety of a Stabilizing Additive to Solve the Problem of Dusting Dumps of Overburden Rocks

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Abstract: The use of an environmentally friendly additive StabOL promotes the formation of a polymer-soil structure. It has been established that in the studied samples of overburden, the effective specific activity of natural radionuclides corresponds to class I (≤ 740 Bq/kg) of mineral raw materials and materials containing radionuclides. In accordance with sanitary rules and regulations, overburden rocks and materials based on them can be handled without restrictions on the radiation factor. Using the biotesting method, it has been proven that the stabilizing additive StabOL does not have an acute toxic effect on test objects (*Daphnia magna* Straus, *Chlorella vulgaris* Beijer) and is safe for the environment and human health.