PROCESSES OF THE MODERN EOLATION AS THE BASIS FOR DEVELOPMENT OF METHODS OF MINE FIELDS RECULTIVATION

ID 060

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ABSTRACT

Intensive perennial development of mining effecting results in a degradation of landscapes, contamination{pollution} of objects of the environment, having technogenic parentage. The most actual problems of mining effecting are recultivation of lands, regeneration of disturbed soil mantle and connatural ecosystems. Regeneration of terrains which are earned additionally at coal mining, is carried out with the use of dump mine rocks. In this connection there is a problem of environmental safety of extraction areas under influence of the processes running with rocks on a diurnal surface.

Researches were carried out in terrain of the coal-mining enterprise in the Dnepropetrovsk region. An evaluation of an ecological state of soils carried out on a salt, microcomponental background on typical fields with various variants of recultivation.

The concept is proved and the mechanism of a modern eolation of dump mine rocks is offered. Two types of an eolation of rocks are picked out and indicators for each of them are offered. It is fixed, that processes are accompanied by leaching not only salts, but also trace substances. The complex procedure including laboratory modelling and natural observation which allows to estimate quality and quantitative composition of mobile forms of ingredients, leached from rocks is offered at various phylums of an eolation.

With application of the suggested procedure it is proved, that leaching is an integrated process and is accompanied by dissolution, exchange reactions, hydrolysis and sorption. It is proved, that the apostatis in composition and

carrying out of heavy metals in environment is intimately linked to conditions of warehousing of waste products which determine phylum of an eolation. According to singled out attributes, dependence of an eolation on landscape conditions is fixed.

The ecological-geochemical model of migration of heavy metals on fields of recultivation and a means of an evaluation of their receipt into environment is offered. This model is put into a basis of a choice of procedure of performance of mine fields recultivation.

Key words: .