

ENVIRONMENTAL GEOCHEMISTRY OF TECHNOGENIC DISPERSION AUREOLES (ON EXAMPLE OF THE ALMALIK MINING AND SMELTING COMPLEX, UPBEKISTAN)

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The executed work is devoted to the problems of environmental geochemistry concerned with the formation and the display character of technogenic haloes of dispersion for some ore elements in soils, vegetation, and also in waters of territories, taking place in a zone of influence of the enterprises of Almalyk mining and smelting complex, guided on production and processing of ores of colour metals. The pollution of a soil cover mainly is caused by dust and gas-smoke through losses, which form extensive technogenic haloes submitted copper, lead, zinc, cadmium, arsenic and other elements with sharp decrease of intensity of anomaly towards peripheries of a halo. The pollution of vegetation is correlated with pollution of a soil cover and also is connected with the receipt of ore-genesis elements into bioweight through root system and to a lesser degree from atmospheric losses of polluting substances. Pollution of underground waters partially inherits the composition of industrial drains and do not correlate with the composition of polluted soils-grounds. The changes in specific composition and morphological indications of plants growing on soils with increased concentration of ore-genesis elements have been revealed, the selective ability of some kinds of plants to absorption of separate elements has been established. Technogenic geochemical zonality by concentration of ore-forming elements depending on a degree of a distance from sources of pollution has been established. In the basis of a geoecological estimation of the main stages of the technology of productions and processing of ores, the complex of nature protective measures, directed to the decrease of negative influence of enterprise of the mining and smelting complex on natural environment is offered.