

**PROBLEMS OF RESPONSIBLE MANAGEMENT
OF ORE DEPOSITS DEVELOPMENT**

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Research methodology. The results are obtained using the following methods: scientific generalization – in establishing the specific features of development of sulfide ore deposits; analysis and synthesis – in determining the dependence of environmental disturbances on the stages of mining.

Results. The problems of responsible management in mining are considered, in particular the problems associated with prospecting, extraction and processing of sulfide ores. It is proved that even prospecting stage is accompanied by extraction of huge amounts of highly toxic sulfide ores, and their dissipation across ore mines and mining centres. It is followed by the changes in geological environment and formation of mine technical reliefs and overall contamination of soil, bottom sediments and river water with heavy metals. Intermediate and final stages of mining give rise to the formation of the mining centers technogenesis prone to expansion and environmental problems.

Novelty. The main principles of responsible management in exploration of ore deposits are developed based on the quantitative assessment of impact of all types of technogenic production and centers on surface waters and geological environment. In the centres of technogenesis with full scale mining, it is recommended to make provisions for the complete set of ecological and economic measures aimed at rehabilitation of the disturbed lands and reclamation of environment. In the centres of technogenesis, once the prospecting stage is finished and perspectives of further development are being considered, it is offered to set up infrastructural elements (roads, bridges, electric power lines, residential complexes) taking into account their possible use in forming resorts, touristic or rock-climbing centres.

Practical value. The developed recommendations on the formation of responsible management in mining, connected with exploration, extraction and processing of sulfide ores, will help to create more effective management complex and mitigate negative environmental impact of ore deposits development.

Keywords: responsible mining production, technogenic deposits, mining centers technogenesis.

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