

Environmental Impact Assessment of Mining in Mouteh Region (Case Study: Darre-Ashki Gold Mine)

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Abstract

Mining activities affect a diverse range of environment factors. Environmental Impact Assessment (EIA) is considered as an important strategy to identify and minimize negative impacts and attainment to sustainable development. Darre - ashki mine by area about 20 ha is located 230 km far from Isfahan city in Mouteh Wildlife Refuge. In this study, the environmental impacts of open pit mining during operation phase was assessed. Integration of two Leopold and ICOLD matrix was applied to assess environmental impacts of such activities on the environment. Results of aggregate values for matrix, showed that the project's impacts in exploitation phase equals -37.5 and the result of matrix by modifying strategies and monitoring programs equals +18 and the most important factors affect by mining is biologic factors specially wildlife. Given to quantitative obtained results from the environmental impact assessment, project will be executable by executing modifying strategies and monitoring programs requirements suggested in this paper.

Keywords: *Environmental Impact Assessment, Sustainable development, Mining, Matrix.*