

SÃO TOMÉ DAS LETRAS QUARTIZITES:ENVIRONMENTAL ANALYSIS AND TECHNOLOGICAL CHARACTERIZATION

SOUZA, G.G.; SANTOS, M.R.C.; CORTELETTI, R.C. Instituto de Geociências, Universidade Federal de Minas Gerais, Belo Horizonte, Brazil

Quartzites from São Tomé das Letras region attract recently the domestic and international market, due to their physical properties and ornamental features; causing increase production and necessity to environmental impact control. These quartzites presents a NE-SW trend with pronounced foliation, granoblastic to granolepidoblastic textures and main petrographically constituted by quartz, muscovite, tourmaline and opaques. Porosity and water absorption - (1,224 +/- 0,044 and 0,468 +/- 0,017 respectively) of the more foliated samples - are shown through physical tests. Impacts Analysis and identification environmental were undertaken according the impacts identification methodology by statistical methods applied to Total Quality Control, focusing all the mining endeavours across São Tomé das Letras range. The main impacts generators were identified by the elaboration of an Impact Relationship Matrix and the Pareto Graphic that correlates Impacts Generators X Direct Impacts. The main impacts are: barren disposal (26%), barren material load (24%) and treatment (15%); totaling 65% of the impacts occur