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## Desulphurization of Machh Coal by Leaching Process

Coal desulfurization prior to usage is frequently subjected to pre-processing to achieve clean fuel and reduce environmental impacts. In this study, desulfurization of Machh coal field of Pakistan was carried out with NaOH and HNO<sub>3</sub> as leaching agents. The effects of particle size (6-10 Mesh) and solvent concentration (5-30wt%) on sulfur removal were investigated. The results indicated that sulfur recovery increases with increasing mesh size and solvent concentration. The highest decrease in the sulphur was observed of 44.85% with 30 wt% HNO<sub>3</sub> and 10 mesh. Sulphur removal was observed 24.72% with NaOH under similar conditions. In comparison, HNO<sub>3</sub> was found effective leaching agent when compared to NaOH.

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