Overcoming environmental challenges in the cement manufacturing sector through cleaner production. A case of Sino Company, Zimbabwe

Abstract

The paper investigated the extent to which Sino Zimbabwe Cement Company (SZCC) implemented Cleaner Production (CP) options to deal with high emissions and waste emanating from its operations. Research data was collected through questionnaires, interviews, direct observations and document analysis. Two sets of questionnaires were prepared targeting workers and the local community who were direct recipients of pollutants. Semi-structured interviews were conducted with key informants such as the Production Manager, the Human Resource Manager, the Finance Manager, Engineering Manager, the Health and Safety Officer and the District Environmental Management Agency Officer. Research findings revealed a reduction in dust emissions, volume of discharged effluent, residuals of oil contaminants and energy consumption. However, solid waste generation and its subsequent disposal remains a problem. Whilst adoption of CP can be viewed as a panacea to most environmental challenges faced by the organization, more investment is required towards elimination of some sources and cause of waste and emissions generation.