

International Conference on the Management of Naturally Occurring Radioactive Materials (NORM) in Industry

VIRTUAL EVENT

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Geochemical study of natural radiation of limestones and shales of Puyango, Ecuador

A geochemical study of natural radiation has been carried out in the Puyango, Ecuador sector, associated with limestones and shales, using a portable gamma spectrometer. A median of dose 3.88 mSv/y and a maximum value of dose 15.62 mSv/y were obtained. The geochemical background value of the dose of natural radioactivity in the study sector was calculated at 3.88 mSv/y. Those people who live near the study area or who preserve corn crops within it, are usually exposed to ionizing radiation, so they have been associated with an annual dose of 20 mSv/y. Therefore it is recommended to make a more detailed study of natural radiation associated with rocks and soils of the sector, as well as carry out studies of heavy metals and natural radioactivity in corn plantations, in order to determine with more precision the possible natural radiation effects.

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