Use of high-pressure water-jetting in decontamination of phosphate facilities

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Abstract

Processing of phosphate ores generates scaling in various equipments with a significant activity concentration of natural nuclides. The degree of contamination and the vector-nuclide itself are very much dependent on the process: radium is not always the most significant nuclide present in the scaling. In some cases, a significant concentration in uranium may also be observed.

In two recent examples of decommissioning of phosphate facilities in Belgium, highpressure water jetting has been used to decontaminate part of the equipment.

The presentation will present these concrete examples, discuss the advantages and limitations of the technique, the issue of the disposal of the waste resulting from the decontamination operations, the issue of the clearance procedure in its practical aspects.