

Reuse of filter-cake from titaniumdioxide industry: technical and regulatory aspects

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Abstract

Production of titanium dioxide with the chloride process generates different streams of NORM residues, the bulk of it consists in filter-cakes. The presentation will describe the NORM aspects of a titanium dioxide factory in Belgium: one type of filter-cake is reused for co-incineration while another type of filter-cake up to recently could only be disposed on a specific landfill. Recently, the company introduced an application to the authorities to reuse this filter-cake as cover material (or more exactly as material for the support layer of the cover) for a nearby phosphogypsum stack. This application involves both an agreement of the environmental authority on the “end-of-waste” status of the filter-cake and an agreement of the radiation protection authority on the radiological aspects.

Next to the overview of NORM streams inside the company, the presentation will describe the regulatory path for the reuse of these filter-cakes as cover material with a focus on the interconnection between environmental regulations (end-of-waste criteria) and radiation protection regulations.
