

## **Different options for NORM waste disposal**

Anne DELOS<sup>a</sup>, Per VARSKOG<sup>b</sup>

<sup>a</sup> ARCADIS ESG 127 boulevard Stalingrad, 69626 Villeurbanne France email : [anne.delos@arcadis-fr.com](mailto:anne.delos@arcadis-fr.com)

<sup>b</sup> ZPIRE LTD Bjerkealleen 31 Postboks 41 NO-2027 Kjeller Norway

Management of NORM waste follows waste hierarchy: from prevention to disposal. The last solution for NORM waste management is disposal. This should be considered once all other possibilities – prevention, minimization, reuse, recovery and energy recovery - have been explored. Most frequently used options for NORM waste disposal are (i) Dilution and dispersion into an approved receiving environment; (ii) Underground disposals in custom built pits, natural caverns or old mine workings and similar facilities, (iii) and surface disposals. The degree of isolation from the public increases with the number of barriers imposed between the waste and the biosphere. These barriers have two main objectives (i) to stand destructive forces from the waste and (ii) protect the waste from outside. The objective of this paper is to present the conception of some surface or sub surface NORM disposals. Some similarities can be observed. Some differences can be highlighted depending of the type of waste and the local regulations.