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Demonstration of the Stability of the Engineered Barrier System of the Borehole Disposal System for the Disposal of Disused Sources in Ghana

Borehole disposal system (BDS) is the first of its kind in the world and currently, Ghana and Malaysia are the two countries that are exploiting the implementation of this disposal system. The safety of this disposal system over long time relies mainly on the engineered and natural barrier systems. Therefore, confidence in the ability of the BDS to provide containment of the radionuclides for the requisite timescale rests on an adequate understanding of the behaviour of the engineered barrier system on the host environmental conditions. It is for these reasons that, in this study, the stability of the engineered barriers was demonstrated to assess their impact on the long-term safety of the BDS.

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