USE OF SALT CAVERN STORAGE TECHNOLOGY ULTIMATE DISPOSAL OF HAZARDOUS WASTE

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ABSTRACT

Current thinking is to hermetically seal the waste in the repository preventing any release of even diluted contaminants whatsoever. Experience gained over the last 2 decades in the storage of crude oil and mineral oil products in salt caverns indicates how this technology could be advantageously applied to the final disposal of hazardous wastes.

Salt caverns employed as sites for ultimate disposal must meet requirements differing to those imposed by mined oil storage. The technology of salt cavern usage has to be adapted accordingly to fulfil hazardous waste disposal needs.

This paper looks in detail at the position of salt cavern repositories within a waste management concept along German legislative lines and illustrates planning data and the technical concept of a project in Lower Saxony. This is followed by a discussion of safety aspects of salt cavern disposal and an economic comparison with conventional mines concludes.

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