Waste Disposal in Solution Mined Caverns; Impact of Special Regulations on the Siting Design and Permitting of a New Project in Texas

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INTRODUCTION

Since the late 1960's increasing attention and substantially increased numbers of statutes and regulatory programs have been enacted to address the problem of waste disposal. This attention has not been limited only to the U.S. but indeed worldwide attention has been put on the issue of secure management of municipal and industrial waste products. In a broader context, worldwide concern resulted in an international conference held in Rio on the environment in 1992. The long term effects of this conference have not yet been felt.

The state of Texas has had the opportunity to review two projects for the disposal of hazardous industrial waste in solution mined caverns in salt dome structures. The earlier project was initially permitted twice and then later denied and the most recent project was denied after lengthy public hearings.

As a result of the two projects, the Texas Natural Resource Conservation Commission (TNRCC) passed new regulations specifically oriented to salt cavern projects in response to legislative directives. This paper discusses the new regulatory design and siting criteria for solution mined caverns that are in response to new statutory directives.