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SUBSURFACE SAFETY SHUTDOWN SYSTEM FOR SALTDOME GAS STORAGE WELLS

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ABSTRACT

This invention relates to an apparatus for containing the release of stored hydrocarbons, hazardous waste or other products from the annulus of a downhole salt dome storage well in a catastrophic situation by means of a subsurface shutdown valve arrangement controlled by a surface safety system.

The shutdown system is a method of controlling stored gas or other products from venting into the atmosphere by a valve system located below the surface and controlled by a surface safety system of a downhole salt dome storage well. The placement of a subsurface shutdown valve assembly will be located on the wellhead tree below all other surface control valve systems and the lower most product surface injection piping of a salt dome storage well. The subsurface shutdown valve arrangement would prevent the venting of gas or other stored products into the atmosphere during a catastrophic occurrence or the failure of surface control systems. The subsurface shutdown valve arrangement will

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