

4th International Conference of Sustanble Development & Urban Construction December, 17-19, 2014



Seismic Behaviour of Buried and Above-Ground Concrete Tanks, as Vital Arteries, in Technical literature

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Abstract

The use of reservoirs for water, petroleum, etc., has become increasingly common. In our country using of concrete tanks for Water storage and its transportation for urban use for reason such as ease of construction, economics and etc., has developed and has a special position. According to the abundance of these tanks while the damage to them when the earthquake accrue, causes the losses of large amounts of refined water, thus considered as vital arteries and it is important to study the seismic behavior of them. Fluid-structure interaction (FSI) and Soil-structure interaction (SSI) are the most important issue in seismic behavior of ground and buried tanks. Therefore this article reviews some researches in the field of the seismic behavior of concrete tanks and fundamental design of them in journal 123, the criteria of design of ground tanks.

Keywords: Concrete tanks, vital arteries, Fluid-structure interaction (FSI), Soilstructure interaction (SSI).

