Table 13.4.: Storage of Liquids in Outdoor Fixed Tanks

ITEM	REQUIREMENTS
7. ABOVE-GROUND STORAGE TANKS	**3. OPEN DIKE OR BUND** i. Dike shall be constructed to provide containment around the tank or group of tanks. ii. Dike shall be sized to hold 110% of volume of largest tank within the dike, excluding the volume of other tank(s) within the dike. iii. Minimum clear space of 3 meters shall be maintained all around the dike. iv. The dike wall shall be minimum half diameter away from the tanks contained within the dike. v. Construction of dike wall shall be with concrete, solid masonry or steel, designed to be liquid tight and to withstand hydrostatic head by released tank content. vi. The height of the dike wall shall be limited to 2 m to minimize pocketing of flammable vapours and to facilitate fire fighting. vii. Dike shall be provided with drain arrangements to remove the fire fighting agent, water with uniform slop of 1% away from the tank towards the sump. viii. Dike containing two or more tanks shall be subdivided by intermediate drain or dikes as per type of tanks and their quantities mentioned in **Table 13.4.e.** ix. Subdivision shall be intermediate drain or minimum ½ m high intermediate dike. Main dike height shall be minimum of intermediate dike. x. The aggregate capacity subdivision requirement shall exclude the individual tank subdivision. xi. For example, Volume of the tank $V=\pi d^2h/4$, Required Volume of Dike = L X B X H Where, V-Volume of the tank, d-diameter of the tank, h– height of the tank L-length of the dike, B-Breadth of the dike, H-height of the dike V=20,016 m^3 , Volume of Dike = Minimum 100.1 m x 100 m x 2 m

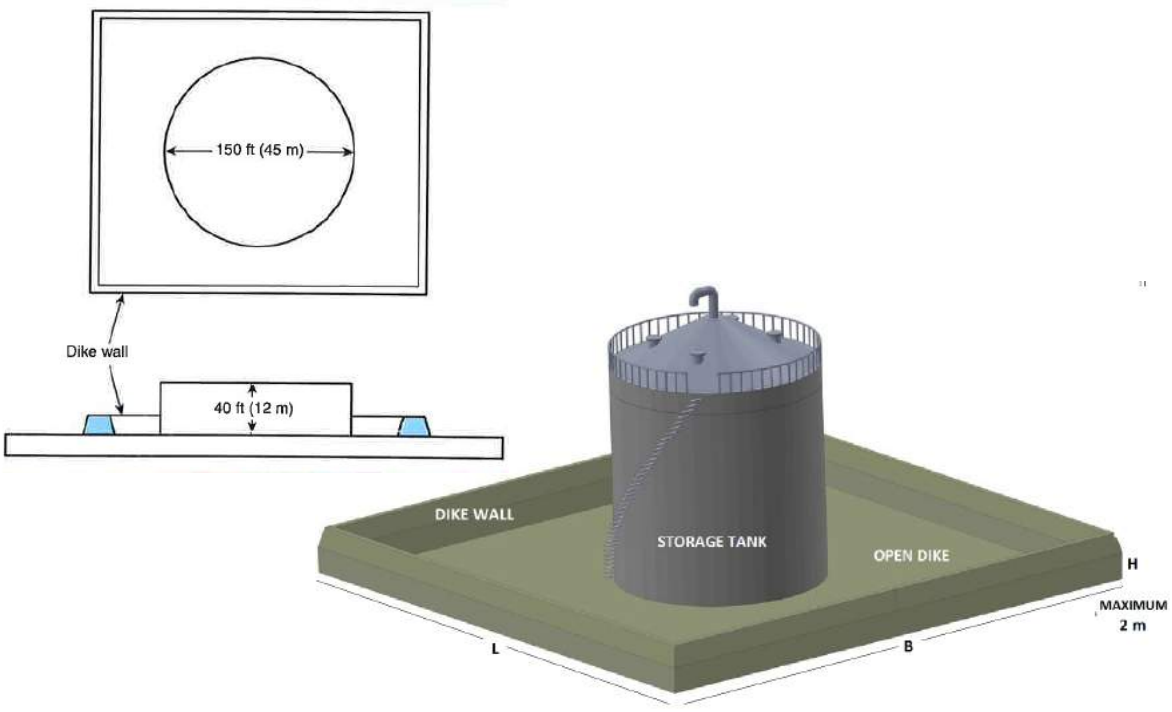

Figure 13.10.: Open Dike