

Table 13.4.: Storage of Liquids in Outdoor Fixed Tanks

ITEM	REQUIREMENTS
4. CORROSION PROTECTION	<ul style="list-style-type: none"> i. Metal used to fabricate the tank shall be thick enough to compensate for internal corrosion expected during the design life of the tank or other approved means of corrosion protection shall be provided. ii. As external corrosion protection, all underground tanks shall be provided with Cathodic protection system that is properly engineered, installed and maintained as per international standards, unless listed and certified as corrosion resistant tank. iii. Where geographical area demands or where engineering analysis requires additional corrosion protection, an internal protection such as additional metal thickness and corrosion resistant coating and linings shall be provided for all tanks.
5. COMMISSIONING AND TESTING	<ul style="list-style-type: none"> i. All tanks, whether shop built or field welded, field erected, shall be tested before they are placed in service. ii. All tanks shall have permanent listing and approval standard marking on the tanks as evidence of compliance. iii. Permanent test records and test results shall be maintained by the owner. iv. Where static head of the bottom of the tank, when filled with liquid, exceeds 10 psi, the tank and its piping shall be hydrostatically pressure tested to a pressure equal to the static head of the liquid filled tank. v. Before the tank is placed in service, all leaks or deformations shall be corrected in an approved manner. vi. All above ground tanks and connections shall be tested for tightness after installation and before placed in service, in accordance with PEI RP200, Recommended Practice for installation of aboveground storage systems for motor vehicle fueling and STI R931, Double wall AST Installation and Testing Instructions. vii. Underground tanks shall be tested for tightness at operating pressure with air, inert gas or water.
6. PERIODIC TESTING AND INSPECTION	<ul style="list-style-type: none"> i. Each tank shall be tested periodically as per manufacturer's instructions and as required by applicable standards to ensure the integrity of the tank. ii. Refer to NFPA 329, Recommended Practice for Handling Releases of Flammable and Combustible Liquids and Gases, for testing of underground tanks. iii. Refer to API 653, STI SP001, API 12R1 and API RP2350 for Tank Inspection, Repair, Alteration, Reconstruction and overfill protection of storage tanks.

