

## Technical Standards

### Storage

Tank Construction Testing Certification & Listing:

BS-EN 12285 – 2 : 2005

4 Hour Fire Rating

SwRI Standard 95-03 and 93-01

UFC A-II-F-1

UL2085

Monitoring & Gauging:

#### **Directive 94/9/EC**

EN 60079-0 : 2006

EN 60079-11 : 2007

EN 60079-26 : 2007

#### **Directive 2004/108/EC (EMC)**

EN 61000-6-2 :2005

EN 61000-6-3 :2007

#### **ATEX**

The Refuels Ltd Supervault MH Tanks have the following systems in line with UL2085 (US) & KIWA (EU) requirements:

- ⤴ HLCO High level cut-off alarm system.
- ⤴ Real time tank content volume and temperature monitoring.
- ⤴ Dry brake user couplings.
- ⤴ Vapour recovery integral for uplifting operations.
- ⤴ User specific security and access control.
- ⤴ Integral self bunding.
- ⤴ Earth circuit continuity.
- ⤴ PPV Pressure proportioning.
- ⤴ Frangible disc explosion protection.

They are also subject to Type Approval consisting of testing against those standards as below:

- ⤴ 4-Hour, 2000° F Fire Test, Internal temperature increased only 165° F
- ⤴ Immediately after the Fire Test the hot tank is exposed to a Hose Stream Test
- ⤴ The same tank is shot with 5 rounds of 150 grain M-2 ball ammunition (823m/sec.) The bullets penetrate the outer containment tank and stop in the insulation.
- ⤴ Finally the same tank is exposed to another two hour fire test with the same pass/fail criteria of the first.

#### General Site Requirements

- ⤴ Tank size – 7.8 metres length, 2.1 metres height & 1.8 metres width.
- ⤴ Hard standing for tank and vehicle operations.
- ⤴ Intercepted, contained or groundwater secured vehicle operations area.
- ⤴ Security lighting.
- ⤴ Security controlled – gated or monitored.
- ⤴ Appropriate access / egress.

#### **Transportation**

European Agreement Concerning the Carriage of Dangerous Goods By Road (ADR 2025)

The Carriage of Dangerous Goods by Road Regulations 2009 (As Amended)

#### **Commissioning/Decommissioning of Sites**

Guidance for Design, Construction, Modification, Maintenance and Decommissioning of Filling Stations (Blue Book 5th Edition)