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Health and Safety at Work (Hazardous Substances—Polyethylene Above Ground Stationary Tanks for Diesel Fuel) Amendment Safe Work Instrument 2023

This safe work instrument is approved under section 227 of the Health and Safety at Work Act 2015 by the Minister for Workplace Relations and Safety, being satisfied that appropriate consultation has been carried out under section 227(3) of that Act.

Contents

Safe Work Instrument

1 Title

This is the Health and Safety at Work (Hazardous Substances—Polyethylene Above Ground Stationary Tanks for Diesel Fuel) Amendment Safe Work Instrument 2023.

2 Commencement

This safe work instrument comes into force on 15 March 2023.

3 Principal safe work instrument

For the purposes of regulation 17.6(1)(k) of the Regulations, this safe work instrument amends the Health and Safety at Work (Hazardous Substances—Polyethylene Above Ground Stationary Tanks for Diesel Fuel) Safe Work Instrument 2017.

4 Clause 4 amended (Interpretation)

(1) In clause 4(1), replace the definition of **AS/NZS 4766** with:

AS/NZS 4766 means the standard AS/NZS 4766:2020 Rotationally moulded buried, partially buried and non-buried storage tanks for water and chemicals

(2) In clause 4(1), after the definition of **isolated place**, insert:

OFTEC OFS T100 means the standard OFTEC Standard OFS T100 Polyethylene Oil Storage Tanks and Tank Bunds for Distillate Fuels

overfill protection device means a device installed inside a tank to stop product flow during delivery before the tank becomes full

5 Clause 12 amended (Fill pipe)

(1) In clause 12, replace "A relevant PCBU must ensure that a tank is fitted with a corrosion-resistant fill pipe that—", with "(1) Subject to subclause (2), a relevant PCBU must ensure that a tank is fitted with a corrosion-resistant fill pipe that —".

(2) In clause 12, insert as subclause (2):

(2) If the tank is supplied with diesel fuel by pump from a delivery tank wagon through a closed connection,—

(a) a relevant PCBU must ensure that an overfill protection device is fitted to the tank; and

(b) subclause (1)(b) does not apply.

6 Clause 14 amended (General design)

After clause 14(b), insert:

(bb) to have a means of monitoring the interstitial space to detect a failure of the primary tank skin; and

7 Clause 15 amended (Quality management system for construction of tanks)

Replace clause 15(c) with:

(c) section 5.1 (general):

(cc) section 5.2 (tank type testing requirements):

8 Clause 16 replaced (Quality management system for integral secondary containment systems)

Replace clause 16 with:

16 Quality management system for integral secondary containment systems

A relevant PCBU must ensure that an integral secondary containment system is constructed under an ISO 9001 quality management system using—

(a) the following provisions of BS EN 13341:

(i) section 4.1 and table 1 (material requirements (excluding the resistance to weathering requirements)):

(ii) section 5.1 (general):

(iii) section 5.2 (tank type testing requirements):

(iv) table 5 (requirements for rotationally-moulded polyethylene tanks (excluding pressure resistance requirements)):

(v) section 7 (durability):

(vi) section 8 (marking):

(vii) Annex A2 (Rotomould material test requirements (excluding A2.5)):

(viii) Annexes B1-B5 and B8 (test methods for determining the tank characteristics); and

(b) either—

(i) Annex B6 of BS EN 13341 (elongation or deformation); or

(ii) clause 4.4.6 (bund deformation requirements) and clause 5.3.6 (bund deformation test) of OFTEC OFS T100.

9 Clause 18 amended (Construction materials: tanks)

Replace clause 18(1)(b) with:

(b) the polyethylene compound used in the construction of a tank—

(i) contains 2.25 ± 0.25% by mass of carbon black, with an average particle size of less than 25 nm; or

(ii) complies with clause 2.7.2 of AS/NZS 4766, if the polyethylene compound is not black in colour.

10 Clause 22 amended (Impact strength test)

In clause 22(1), replace "table A1 of AS/NZS 4766 is performed on a tank" with "table A.1 of AS/NZS 4766 is performed on the tank".

11 Clause 23 replaced (Integral secondary containment system deformation test)

Replace clause 23 with:

23 Additional integral secondary containment system deformation test for vertical cylindrical tanks

A PCBU who constructs a vertical cylindrical tank must, in addition to ensuring the deformation requirements referred to in clause 16 are met, ensure that—

(a) the deformation of the integral secondary containment system is tested according to the following procedure:

(i) locate the integral secondary containment system on a flat surface with a measuring grid:

(ii) assemble the tank and its integral secondary containment system and leave them at 23 ± 2ºC for 48 hours:

(iii) measure the length, width, and diameter of the integral secondary containment system while the tank and its integral secondary containment system are empty:

(iv) cut a 50 mm hole in the base of the tank:

(v) fill the tank with a volume of water at ambient temperature that equates to 110% of the water capacity of the tank, and measure the length and width of the integral secondary containment system:

(vi) measure the diameter of the integral secondary containment system at a point on the side of the tank that is 25% of the total height of the tank from the base of the tank:

(vii) measure the length, width, and diameter of the integral secondary containment system for the tank after 5, 10, and 15 days; and

(b) the maximum increase in deformation of any of these measurements is not more than 2.5%.

Made at Wellington on 13 March 2023.

Hon Michael Wood
Minister for Workplace Relations and Safety

Date of notification in *Gazette*: 14 March 2023.
This safe work instrument is administered by WorkSafe New Zealand.