

### **What are the B620 / B622 – 14 Standards?**

The CSA B620/B622 Standards set out criteria for the design and maintenance of Transport Canada-approved **portable pressure tanks**, including **TDU's** and nurse tanks used in the application of anhydrous ammonia fertilizer on farm fields. Due to the nature of the business, the operation of these tanks (loading/unloading, towing on public roads, etc.) is covered under the *Transportation of Dangerous Goods Regulations* (TDGR). For the purposes of this standard, a tank commonly known as a nurse tank or applicator tank, operated exclusively for agriculture purposes shall be considered as a portable tank.

Answers to specific questions on this matter are provided by Transport Canada at the following links, including how to obtain a copy of these standards:

B620-14 Specification: <https://www.tc.gc.ca/eng/tdg/moc-highway-csab620-472.html>

B622-14 Specification: <https://www.tc.gc.ca/eng/tdg/moc-highway-csab622-309.html>

### **What are Special Requirement 54 and Special Requirement 55?**

The following are Special Requirement excerpts from the CSA B622-14 standard:

#### **Special Requirement 54.**

*“As long as the Specific Requirements 10, 33, 46, and 56 (a) (ii) and (b) are fulfilled, a tank that meets the requirements of the edition of the ASME Code under which it was built, and is marked accordingly, may be used if*

- (a) it has a MAWP greater than or equal to 1725 kPa, gauge (250 psi);*
- (b) it is painted white or aluminum;*
- (c) it is periodically inspected and tested in accordance with the requirements for TC 331 tanks in Clause 7 of CSA B620-14;*
- (d) it was manufactured and used to transport anhydrous ammonia prior to 1 July 1996;*
- (e) it complies with the requirements in Clause 5.2.6 for TC 331 tanks;*
- (f) any repairs made after the enforcement date of this Standard have been made in compliance with the requirements for TC 331 tanks in Clause 7.5 of CSA B620-14; and*
- (g) it complies with the requirements of the following clauses of CSA B620-09:*
  - (i) Clause 5.1.3 for securement;*
  - (ii) Clauses 5.1.5.2 to 5.1.5.4 for rear-end protection;*
  - (iii) Clause 5.2.2.1 for discharge control devices; and*
  - (iv) Clause 5.2.2.10.1 for excess flow protection.”*

#### **Special Requirement 55.**

*“A tank commonly known as a nurse tank or applicator tank, operated exclusively for agricultural purposes, shall not have to meet the specification requirements for a TC 51 tank or the rear-end protection requirements of Clause 5.2.5(a) if it was manufactured prior to the enforcement date of this standard and*

- (a) it is periodically inspected and tested in accordance with the requirements for TC 51 tanks in Clause 7 of CSA B620-14, except that the external visual inspection shall be conducted annually and the pressure test shall be conducted every 3 years;*
- (b) it has a MAWP greater than or equal to 1725 kPa, gauge (250 psi), and meets the requirements of the ASME Code under which it was built and is marked accordingly;*
- (c) it is equipped with safety relief valves meeting the requirements of CGA S-1.2;*
- (d) it is painted white or aluminum;*
- (e) it has a volumetric capacity of 11 365 L (3000 US gal; 2500 Imp. gal) or less;*

(f) it is loaded to a filling ratio no greater than 56;  
(g) it is securely mounted on a farm wagon or a farm implement; and  
(h) any repairs made after the enforcement date of this Standard have been made in compliance with the requirements for TC 51 tanks in Clause 7.5 of CSA B620-14.”

**What does CAAR’s Equivalency Certificate cover?**

CAAR has received an Equivalency Certificate (#11960) from Transport Canada to allow nurse and applicator tanks that meet all of the following criteria to continue with a 5 year Pressure (P) test frequency:

- a) If the tank meets the allowances under Special Requirement (SR) 55 (see note 1 below) of the B622-14 Standard, which historically was the stated design requirements for nurse and applicator tanks, and was manufacturer prior to the enforcement date of this standard; and
- b) If proven the tank is post-weld heat treated (see example in Figure 1); and
- c) Have a Maximum Allowable Working Pressure (MAWP) of:
  - a. 265 psi; or,
  - b. 250 psi, and can be demonstrated that the tank was purposefully built for ammonia use; and,
- d) Appropriate training on the certificate requirements is provided to those using its allowance.

CAAR members can download a copy of the certificate here.

**Now that B620/22 – 14 Standards are being enforced, what does this mean for my fleet?**

New compliance requirements include:

- a) An Annual Visual Inspection (V) is now required for nurse and applicator tanks that do not meet the TC 51 specification and are allowed under SR 55 of the CSA B622-14 Standard (i.e. nurse and applicator tanks built to the ASME specification);
- b) The Pressure (P) test frequency for anhydrous ammonia nurse tanks and applicator tanks has been reduced to once every 3 years for all tanks that:
  - i. Do not meet the TC 51 or TC 331 specification and are allowed under Special Requirement 55 of the CSA B622-14 Standard (i.e. nurse and applicator tanks built to the ASME specification); OR
  - ii. Do not meet the Equivalency Certificate requirements under the Transport Canada issued certificate number 11960;
- c) The Pressure (P) test frequency for Highway tanks (commonly referred to as Field Delivery Units) has been reduced to once every 3 years for all tanks that are constructed and used before July 1, 1996 that do not meet the TC 331 specification and are allowed under SR 54 (see note 1 below) of the CSA B622-14 standard;
- d) The specified design standard for all new nurse and applicator tanks appears to be a TC 331 specification, based on the definition of a Highway Tank in the new CSA Standards.

**When do I need to be in compliance?**

B620/622 – 14 Standards came into force on January 12, 2018. CAAR members affected by these changes must ensure full compliance with the new standard requirements before filling any anhydrous ammonia tank used for transport purposes.

**How can I tell if a tank is Post Heat Weld Treated (PWHT)?**

Information on a tank data plate or Manufacturer’s Statement (U1A) certificate can be used to determine if a tank was post weld heat treated (see Figure 1)

**What is CAAR doing to help?**

CAAR recognizes the increased number of highway tanks, nurse tanks, and applicator tanks that will require incremental pressure testing and visual inspections in the first year of compliance, and the immediate potential impact to the membership, and Canadian agriculture industry, for the spring 2018 fertilizer season.

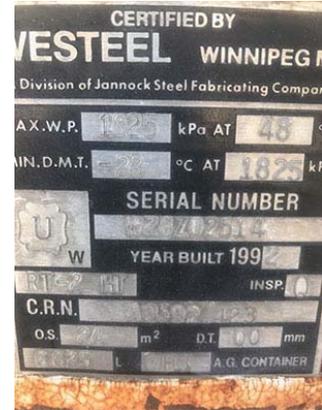


Figure 1

In collaboration with Fertilizer Canada, CAAR continues to communicate how the newly enforced standard impact you directly. CAAR and Fertilizer Canada, in consultation with Transport Canada, are focused on finding a solution for:

- a) extending the implementation phase-in timeframe for tanks still affected by these changes;
- b) obtaining the same allowance, as CAAR received for nurse and applicator tanks, for highway tanks using the SR 54 allowance of the CSA B622-14 standard; and,
- c) establishing reasonable and practical tank design specification requirements for new nurse and applicator tanks.

CAAR will continue to communicate on this important issue to all members to ensure that you have the proper information to stay in compliance.

*CAAR Frequently Asked Questions re:CSA B620/622-14, V1, published January 17, 2018*