

§ 173.5a Oilfield service vehicles and mechanical displacement meter provers.

(a) *Oilfield service vehicles.* Notwithstanding §173.29 of this subchapter, a cargo tank motor vehicle used in oilfield servicing operations is not subject to the specification requirements of this subchapter provided—

- (1) The cargo tank and equipment contains only residual amounts (*i.e.* , it is emptied so far as practicable) of a flammable liquid alone or in combination with water,
- (2) No flame producing device is operated during transportation, and
- (3) The proper shipping name is preceded by “RESIDUE: LAST CONTAINED * * *” on the shipping paper for each movement on a public highway.

(b) *Mechanical displacement meter provers.* (1) For purposes of this section, a mechanical displacement meter prover is a mechanical device, permanently mounted on a truck chassis or trailer and transported by motor vehicle, consisting of a pipe assembly that is used to calibrate the accuracy and performance of meters that measure the quantity of a product being pumped or transferred at facilities such as drilling locations, refineries, tank farms and loading racks.

(2) A mechanical displacement meter prover is excepted from the specification packaging requirements in part 178 of this subchapter provided it—

- (i) Contains only the residue of a Class 3 or Division 2.1 material. For liquids, the meter prover must be drained to the maximum extent practicable and may not exceed 10% of its capacity; for gases, the meter prover must not exceed 25% of the marked pressure rating;
- (ii) Has a water capacity of 3,785 L (1,000 gallons) or less;
- (iii) Is designed and constructed in accordance with chapters II, III, IV, V and VI of the ASME Standard B31.4 (IBR, see §171.7 of this subchapter);
- (iv) Is marked with the maximum service pressure determined from the pipe component with the lowest pressure rating; and
- (v) Is equipped with rear-end protection as prescribed in §178.337–10(c) of this subchapter and with 49 CFR 393.86 of the Federal Motor Carrier Safety Regulations.

(3) The description on the shipping paper for a meter prover containing the residue of a hazardous material must include the phrase “RESIDUE: LAST CONTAINED * * *” before the basic description.

(4) *Periodic test and inspection.* (i) Each meter prover must be externally visually inspected once a year. The external visual inspection must include at a minimum: checking for leakage, defective fittings and welds, defective closures, significant dents and other defects or abnormalities which indicate a potential or actual weakness that could render the meter prover unsafe for transportation; and

(ii) Each meter prover must be pressure tested once every 5 years at not less than 75% of design pressure. The pressure must be held for a period of time sufficiently long to assure detection of leaks, but in no case less than 5 minutes.

(5) In addition to the training requirements in subpart H, the person who performs the visual inspection or pressure test and/or signs the inspection report must have the knowledge and ability to perform them as required by this section.

(6) A meter prover that fails the periodic test and inspection, must be rejected and removed from hazardous materials service unless the meter prover is adequately repaired, and thereafter, a successful test is conducted in accordance with the requirements of this section.

(7) Prior to any repair work, the meter prover must be emptied of any hazardous material. A meter prover containing flammable lading must be purged.

(8) Each meter prover successfully completing the external visual inspection and the pressure test must be marked with the test date (month/year), the type of test or inspection as follows:

(i) V for external visual inspection; and

(ii) P for pressure test.

The marking must be on the side of a tank or the largest piping component in letters 32 mm (1.25 inches) high on a contrasting background.

(9) The owner must retain a record of the most recent external visual inspection and pressure test until the next test or inspection of the same type successfully completed. The test or inspection report must include the following:

(i) Serial number or other meter prover identifier;

(ii) Type of test or inspection performed;

(iii) Test date (month/year);

(iv) Location of defects found, if any, and method used to repair each defect;

(v) Name and address of person performing the test or inspection;

(vi) Disposition statement, such as "Meter Prover returned to service" or "Meter Prover removed from service".

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