

DRAFT

PROPOSED REGULATORY STANDARDS AND SPECIFICATIONS FOR ENHANCED CONVENTIONAL NOZZLES AND HOSES

All enhanced conventional nozzles and hoses must be certified to meet the standards and specifications contained in Table 1 below.

Table 1
Proposed Standards and Specifications for Enhanced Conventional Nozzles and Hoses

Performance Type	Requirement	Std Spec.	Test Procedure
Spillage Including Drips from Spout	≤ 0.24 pounds/1,000 gallons	Std.	TP-201.2C
Post-Fueling Drips	≤ 3 Drops/Refueling	Std.	TP-201.2D
Nozzle Criteria Each Nozzle Shall:	Comply with specified dimensions (section 4.7.3 of CP-201 and section 5.7.3 of CP-206)	Spec.	Engineering Evaluation
Liquid Retention Nozzle "Spitting"	≤ 100 ml/1,000 gallons ≤ 1.0 ml per nozzle per test	Std.	TP-201.2E
Connectors and Fittings	No Indication of Liquid or Vapor Leaks	Spec.	Visual Inspection
Insertion Interlock	Verification of No Liquid Flow Prior to Bellows Compression	Spec.	Testing and Eng. Eval.
Nozzle Insertion Force	Pounds (force) to Retaining Device Specified by Applicant and Verified During Certification Testing	Spec.	Testing and Eng. Eval.
Low Permeation Hoses	Permeation rate ≤ 10.0 g/m ² /day (section 20 of CP-201 and Section 21 of CP-206)	Std.	UL 330 (7th ed)

Certification of enhanced conventional nozzles shall be conducted in accordance with all applicable portions of this Certification Procedure.

21.1 Spillage

21.1.1 The emission factor for spillage shall not exceed 0.24 pounds/1,000 gallons.

21.1.2 The number of self-service refueling operations observed during certification testing of any system for spillage shall not be less than:

400 refueling operations (not including topoffs); and
160 fill-ups (terminated by full tank shut-off, not including topoffs).

21.1.3 A minimum of four nozzles must be tested for determination of spillage.

21.2 Post-Fueling Drips

A minimum of four nozzles must be tested for determination of post-fueling drips.

21.3 Liquid Retention

A minimum of four nozzles must be tested for determination of liquid retention and spitting.

21.4 Application for Certification

The preliminary application shall contain results of the following:

21.2.1 At least 80 observations of spillage (including at least 40 percent fill-ups), 20 observations for each nozzle;

21.2.2 At least 20 tests for post-fueling drips, 5 tests for each nozzle; and

21.2.3 At least 20 tests for liquid retention and spitting, 5 tests for each nozzle.

21.5 Vapor Recovery Certification Testing

There is no minimum gasoline throughput requirement for the certification test site(s); however, the applicant is still required to submit throughput data as specified in this Certification Procedure.