Registered Service Agency Advisory Committee
Recommendations to CDFA DMS

(Updated: 10/25/2023)

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4 CCR § 4001

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(Reinstate Handbook 44 (HB 44); 3/02/2023)

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(b) equipment that has been placed in commercial service within the preceding 30 days and is being officially tested for the first time;
(c) equipment that has been returned to commercial service following official rejection for failure to conform to performance requirements and is being officially tested for the first time within 30 days after corrective service;
(d) equipment that is being officially tested for the first time within 30 days after major reconditioning or overhaul;
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Repaired Element.
(Reinstate HB 44; 3/02/2023)

New Items For 4 CCR § 4001

Code Section XX

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4 CCR § 4002

§ 4002. Additional Requirements.

The following sections apply to devices in addition to the Handbook 44 requirements that are incorporated by reference. The number in parenthesis following the section number and section title refers to the related section in Handbook 44; i.e., 4002.1. General Code (1.10.) refers to Section 1.10. General Code in Handbook 44.

§ 4002.1. General Code (1.10.)

(a) Type Approval Use. Upon written authorization of the Secretary, a county sealer may allow a device to be used for commercial purposes during a type approval inspection period following initial testing.
(Retain Additional Requirement; 6/14/2023)

§ 4002.2. Scales (2.20.)

(a) Minimum Load on a Vehicle Scale. Except for weighments of ferrous metals, cardboard, paper, rags or plastic, and the weighing of vehicles for registration purposes, a vehicle scale shall not be used for weighing net loads less than the value of 20 scale divisions.
(Retain Additional Requirement; 8/02/2022)

(b) Class III, Class III L and Unmarked Devices Used For Recycling. Except for weighments of ferrous metals, cardboard, paper, rags, or plastic, Class III, Class III L and unmarked devices used in recycling shall not be used for weighing net loads less than the value of 20 scale divisions.
(Retain Additional Requirement; 8/02/2022)

(c) Livestock Scales Not Equipped With Balance Indicator. The Sensitivity Requirement for livestock scales not equipped with a balance indicator shall be 10 pounds, notwithstanding the requirements of Handbook 44, Section 2.20. Scales, T.2.7.2.
(Repeal Additional Requirement; 3/02/2023)

(d) Customer's Indications. Weight indications shall be shown on the customer's side of computing scales when these are used for direct sales to retail customers. Computing scales equipped on the operator's side with digital indications, such as net weight, unit

price, or total price, shall be similarly equipped on the customer's side. *Unit price displays visible to the customer shall be in terms of whole units of weight, and not in common or decimal fractions. (Nonretroactive May 9, 1996)*
(Repeal Additional Requirement; 8/02/2022)

§ 4002.3. Vehicle-Tank Meters. (3.31.)

UR.2.2. Ticket Printer; Customer Ticket. Vehicle-mounted metering systems shall be equipped with a ticket printer which shall be used for all sales where product is delivered through the meter. A copy of the ticket issued by the device shall be left with the customer at the time of delivery or as otherwise specified by the customer. [Nonretroactive as of January 1, 1995.]
(Retain Additional Requirement; 5/11/2023)

§ 4002.4. Liquefied Petroleum Gas and Anhydrous Ammonia Liquid-Measuring Devices. (3.32.)

(a) Temperature Compensation. All liquefied petroleum gas measuring devices with a manufacturer's maximum rated flow capacity exceeding 20 gallons per minute shall be equipped with automatic means to correct the volume delivered to the volume at 60 °F. The automatic temperature compensator shall be connected, operable and in use at all times.
(Repeal Additional Requirement; 5/11/2023)

(b) The provisions of Handbook 44, Section 3.32., S.3.1, Liquefied Petroleum Gas and Anhydrous Ammonia Liquid-Measuring Devices Code shall not apply to equipment located at wholesale loading terminals when used exclusively for the purpose of filling transports utilizing the spray fill, or when the delivery is being made simultaneously to truck and trailer from one meter when the product being delivered into the truck and trailer is being purchased by the same person.
(Repeal Additional Requirement; 5/11/2023)

(c) Wholesale Deices Equipped With Automatic Temperature Compensating Systems. On wholesale devices equipped with automatic temperature compensating systems, normal tests:
(1) Shall be conducted with the temperature compensating system connected and operating by comparing the compensated volume indicated or recorded to the actual delivered volume corrected to 60 °F; and

(2) May be conducted with the temperature compensating system deactivated, comparing the uncompensated volume indicated or recorded to the actual delivered volume.
The first test shall be performed with the automatic temperature compensating system operating in the “as found” condition. On devices that indicate or record both the compensated and uncompensated volume for each delivery, the tests in (1) and (2) may be performed as a single test.
(Repeal Additional Requirement; 5/11/2023)

(d) Vapor-Return Line. During any metered delivery of liquefied petroleum gas from a supplier's tank to a receiving container, there shall be no vapor-return line from the receiving container to the supplier's tank.
(Repeal Additional Requirement; 5/11/2023)

(e) Signs. Any retail liquefied petroleum gas dispenser, with the exception of those mounted on a motor vehicle, shall display a sign showing the price schedule of all transactions. The sign shall be where it is plainly discernable to the customer. All letters, figures or numerals used to express the price schedule shall be at least three-quarters of an inch in height.
(Retain Additional Requirement; 6/14/2023)

§ 4002.5. Hydrocarbon Gas Vapor-Measuring Devices. (3.33.)

(a) Leak Test. Each meter shall be submitted to a pressure leak test not to exceed the manufacturer's maximum rated pressure.
(Retain Additional Requirement; 5/11/2023)

(b) Temperature Compensation. - If a device is equipped with an automatic temperature compensator, this shall be indicated on the badge or immediately adjacent to the badge of the device and on the register.
(Retain Additional Requirement; 5/11/2023)

(c) Retention of Customer Invoices. Any person engaging in the sale of hydrocarbon gas vapor shall retain a record of:
(1) each individual hydrocarbon gas vapor meter billing invoice, and
(2) the applicable rate schedule for a period of not less than 12 months and shall make them available at reasonable times for inspection and copying by the customer and the county sealer of weights and measures.
(Retain Additional Requirement; 5/11/2023)

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§ 4002.7. Farm Milk Tanks. (4.42.)

(a) Calibration at Installation. Any farm milk tank exceeding 1,000 gallons capacity installed or relocated after January 1, 1982 shall be calibrated at the farm and a volume chart prepared before the acceptance test is performed.
(No Recommendation yet)

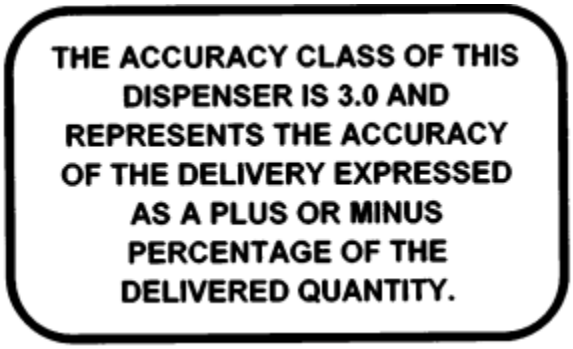
§ 4002.8. Liquid-Measuring Devices. (3.30.)

(a) Wholesale Device Equipped With Automatic Temperature Compensating Systems. On wholesale devices equipped with automatic temperature compensating systems, normal tests:
(1) shall be conducted with the temperature compensating system connected and operating by comparing the compensated volume indicated or recorded to the actual delivered volume corrected to 60 °F, and
(2) may be conducted with the temperature compensating system deactivated by comparing the uncompensated volume indicated or recorded to the actual delivered volume.
The first test shall be performed with the automatic temperature compensating system operating in the “as found” condition.
On devices that indicate or record both the compensated and uncompensated volume for each delivery, the tests in (1) and (2) may be performed as a single test.
(Repeal Additional Requirement; 5/11/2023)

§ 4002.9. Hydrogen Gas-Measuring Devices (3.39).

A.4. Type Evaluation.--The National Type Evaluation Program (NTEP) or California Type Evaluation Program (CTEP) will accept for type evaluation only those hydrogen gas-measuring devices that comply with all applicable requirements of this article.
S.5.2. Location of Accuracy Class 2.0, 3.0, 5.0, 7.0, and 10.0 Information--An additional Accuracy Class statement shall be placed adjacent to the quantity display on the face for the dispenser and shall be conspicuously, legibly, and indelibly marked with a statement such as “The Accuracy Class of this dispenser is XX.0 and represents the accuracy of the delivery expressed as a plus or minus percentage of the delivered quantity”. The lettering shall be in Helvetica or Arial Bold font type, in all capitals, and no less than $^{3}/_{16}$ inch (0.48 cm) in height.

NOTE: The XX.0 is the Accuracy Class as stated on the NTEP Certificate of Conformance or CTEP Certificate of Approval and is part of the identification information required in paragraph S.5. The rating represents the allowable limits of error expressed as a plus and minus value.
EXAMPLE:



T.2. Tolerances. The tolerances for hydrogen gas-measuring devices are listed in Table T.2. Accuracy Classes and Tolerances for Hydrogen Gas-Measuring Devices.
Table T.2. Accuracy Classes and Tolerances for Hydrogen Gas-Measuring Devices Used to Measure Hydrogen Gas as a Vehicle Fuel.

Accuracy Class.	*Acceptance Tolerance.*	*Maintenance Tolerance.*
2.0	1.5 %	2.0 %
3.0	2.0 %	3.0 %
5.0	4.0 %	5.0 %
7.0	5.0 %	7.0 %
10.0	5.0 %	10.0 %

In Table T.2., above, the tolerance values for Accuracy Class 10.0 hydrogen gas-measuring devices are applicable to devices installed prior to January 1, 2018.
(No Recommendation yet)

§ 4002.10. Mass Flow Meters. (3.37.)

S.1.3.1.1. Compressed Natural Gas Used as an Engine Fuel. -- When compressed natural gas is dispensed as an engine fuel, the delivered quantity shall be indicated in “gasoline gallon equivalent (GGE) units.” (Also see Appendix D definitions.)
S.1.3.1.2. Liquefied Natural Gas Used as an Engine Fuel. -- When liquefied natural gas is dispensed as an engine fuel, the delivered quantity shall be indicated in “diesel gallon equivalent (DGE) units.” (Also, see Appendix D definitions.)
S.5.2. Marking of Gasoline Volume Equivalent Conversion Factors for Compressed Natural Gas. -- A device dispensing compressed natural gas shall have the statement “1

Gasoline Gallon Equivalent (GGE) equals 5.66 lb of Compressed Natural Gas" permanently and conspicuously marked on the face of the dispenser.
S.5.3. Marking of Diesel Volume Equivalent Conversion Factors for Liquefied Natural Gas. -- A device dispensing liquefied natural gas shall have the statement "1 Diesel Gallon Equivalent (DGE) equals 6.06 lb of Liquefied Natural Gas" permanently and conspicuously marked on the face of the dispenser.
UR.3.1.1. Marking of Equivalent Conversion Factor for Compressed Natural Gas. -- A device dispensing compressed natural gas shall have the statement "1 Gasoline Gallon Equivalent (GGE)) equals 5.66 lb of Compressed Natural Gas" permanently and conspicuously marked on the face of the dispenser.
U.R.3.1.2. Marking of Equivalent Conversion Factor for Liquefied Natural Gas. -- A device dispensing liquefied natural gas shall have the statement "1 Diesel Gallon Equivalent (DGE) equals 6.06 lb of Liquefied Natural Gas" permanently and conspicuously marked on the face of the dispenser.
Appendix D -- Definitions: diesel gallon equivalent (DGE). Diesel gallon equivalent (DGE) means 6.06 pounds of natural gas. [3.37]
Appendix D -- Definitions: gasoline gallon equivalent (GGE). Gasoline gallon equivalent (GGE) means 5.66 pounds of natural gas. [3.37]
(Retain Additional Requirement; 5/11/2023)

§ 4002.11. Electrical Vehicle Fueling Systems. (3.40.)

A.1.1. Effective Date for AC EVSE. -- All AC EVSE used for commercial purposes shall comply with all requirements of this article in accordance with the following:
(a) All AC EVSE installed prior to January 1, 2021, shall comply with the requirements of this article by January 1, 2031.
(b) All AC EVSE installed on or after January 1, 2021, shall comply with the requirements of this article upon installation.
A.1.2. Effective Dates for DC EVSE. -- All DC EVSE used for commercial purposes shall comply with all requirements of this article in accordance with the following:
(a) All DC EVSE installed prior to January 1, 2023, shall comply with the requirements of this article by January 1, 2033.
(b) All DC EVSE installed on or after January 1, 2023, shall comply with the requirements of this article upon installation.
A.4. Type Evaluation. -- The National Type Evaluation Program (NTEP) or California Type Evaluation Program (CTEP) will accept for type evaluation only those EVSEs that comply with all requirements of this article and have received safety certification by a nationally recognized testing laboratory (NRTL).

S.1.3.2. EVSE Value of Smallest Unit. -- The value of the smallest unit of indicated delivery by an EVSE, and recorded delivery if the EVSE is equipped to record, shall be no greater than 0.0005 MJ or 0.0001 kWh.
S.2.4.1. Unit Price. -- An EVSE shall be able to indicate on each face the unit price at which the EVSE is set to compute or to dispense at any point in time during a transaction. A computing EVSE shall display the unit price in whole cents (e.g., $0.12) or tenths of one cent (e.g., $0.119) on the basis of price per megajoule (MJ) or kilowatt-hour (kWh). In cases where the electrical energy is unlimited or free of charge, this fact shall be clearly indicated in place of the unit price.
S.2.4.2. Equipment Capacity and Type of Voltage. -- An EVSE shall be able to conspicuously display on each face the maximum rate of energy transfer (i.e., maximum power) and the type of current associated with each unit price offered (e.g., 7 kW AC, 25 kW DC, etc.).
S.2.7. Indication of Delivery. -- The EVSE shall automatically display on its face the initial zero condition and the quantity delivered (up to the capacity of the indicating elements).
S.3.5. Temperature Range for System Components. -- EVSEs shall be accurate and correct over the temperature range of - 40 °C to + 85 °C (- 40 °F to 185 °F). If the system or any measuring system components are not capable of meeting these requirements, the temperature range over which the system is capable shall be stated on the National Type Evaluation Program (NTEP) Certificate of Conformance (CC) or California Type Evaluation Program (CTEP) Certificate of Approval (COA), conspicuously, legibly, and indelibly marked on the EVSE, and installations shall be limited to the narrower temperature limits.
S.5.2. EVSE Identification and Marking Requirements. -- In addition to all the marking requirements of Section 1.10. General Code, paragraph G-S.1. Identification, each EVSE shall have the following information conspicuously, legibly, and indelibly marked:
(a) voltage rating;
(b) maximum current deliverable;
(c) type of current (AC or DC or, if capable of both, both shall be listed);
(d) minimum measured quantity (MMQ); and
(e) temperature limits, if narrower than and within - 40 °C to + 85 °C (- 40 °F to 185 °F).
N.2. Starting Load Test. -- A system starting load test may be conducted by applying rated voltage and 0.5-ampere load.
T.2. Load Test Tolerances. -- The tolerances for EVSE load tests shall be as shown in Table T.2. Accuracy Classes and Tolerances for EVSE.
Table T.2.Accuracy Classes and Tolerances for EVSE

Accuracy Class	*Application or Commodity Being Measured*	*Acceptance Tolerance*	*Maintenance Tolerance*
2.0	AC electricity as a vehicle fuel	1.0 %	2.0 %
5.0[1]	DC electricity as a vehicle fuel	2.5 %	5.0 %
2.0[2]	DC electricity as a vehicle fuel	1.0 %	2.0 %

1 The tolerance values for Accuracy Class 5.0 DC EVSE are applicable to devices installed prior to January 1, 2033.
2 The tolerance values for Accuracy Class 2.0 DC EVSE are applicable to devices installed on or after January 1, 2033.
Appendix D. Definitions
electricity as vehicle fuel. -- Electrical energy transferred to or stored onboard an electric vehicle primarily for the purpose of propulsion. [3.40]
(No Recommendation yet)

New Items For 4 CCR § 4002.

§ 4002.1. 1.10. General Code.

G-S.1. Identification.
(Note: Same change needs to be made in other specific codes sections)
Require any device with a CTEP COA to be permanently marked with information, similar to the requirement for devices with a NTEP CC.
(Recommended Additional Requirement; 6/14/2023)

G-UR.4.1. Maintenance of Equipment.
Clarify the meaning of predominance and make it a nonretroactive requirement.
(Recommended Additional Requirement; 6/14/2023)