

**State of California
Office of Administrative Law**

In re:
Department of Food and Agriculture

Regulatory Action:

Title 04, California Code of Regulations

Adopt sections:

Amend sections: 4001, 4002.9

Repeal sections:

NOTICE OF APPROVAL OF REGULATORY
ACTION

Government Code Section 11349.3

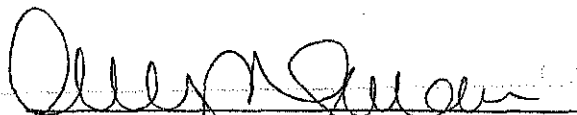
OAL Matter Number: 2019-1210-01

OAL Matter Type: Regular (S)

In this regular rulemaking, the Department of Food and Agriculture amends two sections related to requirements set forth in the National Institute of Standards and Technology Handbook 44 "Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices" and other requirements applicable to hydrogen gas-measuring devices.

OAL approves this regulatory action pursuant to section 11349.3 of the Government Code. This regulatory action becomes effective on 1/23/2020.

Date: January 23, 2020


Amy R. Gowah
Attorney

For: Kenneth J. Pogue
Director

Original: Karen Ross, Secretary
Copy: Samuel Ferris

NOTICE PUBLICATION/REGULATIONS SUBMISSION

REGULAR (See instructions on reverse)

For use by Secretary of State only

STD. 400 (REV. 01-2013)

OAL FILE NUMBERS	NOTICE FILE NUMBER	REGULATORY ACTION NUMBER	EMERGENCY NUMBER
	Z-2019-0521-01	2019-1210-01S	

ENDORSED - FILED in the office of the Secretary of State of the State of California

JAN 23 2020 3:09 PM

For use by Office of Administrative Law (OAL) only

RECEIVED DATE	PUBLICATION DATE	2019 DEC 10 A 8:48
MAY 21 '19	MAY 31 '19	OFFICE OF ADMINISTRATIVE LAW
Office of Administrative Law	NOTICE	REGULATIONS

AGENCY WITH RULEMAKING AUTHORITY
Department of Food and Agriculture

AGENCY FILE NUMBER (If any)

A. PUBLICATION OF NOTICE (Complete for publication in Notice Register)

1. SUBJECT OF NOTICE	TITLE(S)	FIRST SECTION AFFECTED	2. REQUESTED PUBLICATION DATE
Hydrogen Gas-Measuring Devices (3.39)	4	4002.9	May 31, 2019
3. NOTICE TYPE	4. AGENCY CONTACT PERSON	TELEPHONE NUMBER	FAX NUMBER (Optional)
<input checked="" type="checkbox"/> Notice re Proposed Regulatory Action <input type="checkbox"/> Other	Samuel Ferris	(916) 229-3000	(916) 229-3055
OAL USE ONLY	ACTION ON PROPOSED NOTICE	NOTICE REGISTER NUMBER	PUBLICATION DATE
<input type="checkbox"/> Approved as Submitted <input type="checkbox"/> Approved as Modified <input type="checkbox"/> Disapproved/Withdrawn		2019, 22-2	5/31/2019

B. SUBMISSION OF REGULATIONS (Complete when submitting regulations)

1a. SUBJECT OF REGULATION(S)	1b. ALL PREVIOUS RELATED OAL REGULATORY ACTION NUMBER(S)
HYDROGEN GAS-MEASURING DEVICE	

2. SPECIFY CALIFORNIA CODE OF REGULATIONS TITLE(S) AND SECTION(S) (Including title 26, if toxics related)	ADOPT
SECTION(S) AFFECTED (List all section number(s) individually. Attach additional sheet if needed.)	AMEND
TITLE(S)	REPEAL
4	4001 AND 4002.9

3. TYPE OF FILING

<input checked="" type="checkbox"/> Regular Rulemaking (Gov. Code §11346)	<input type="checkbox"/> Certificate of Compliance: The agency officer named below certifies that this agency complied with the provisions of Gov. Code §§11346.2-11347.3 either before the emergency regulation was adopted or within the time period required by statute.	<input type="checkbox"/> Emergency Readopt (Gov. Code, §11346.1(h))	<input type="checkbox"/> Changes Without Regulatory Effect (Cal. Code Regs., title 1, §100)
<input type="checkbox"/> Resubmittal of disapproved or withdrawn nonemergency filing (Gov. Code §§11349.3, 11349.4)	<input type="checkbox"/> Resubmittal of disapproved or withdrawn emergency filing (Gov. Code, §11346.1)	<input type="checkbox"/> File & Print	<input type="checkbox"/> Print Only
<input type="checkbox"/> Emergency (Gov. Code, §11346.1(b))		<input type="checkbox"/> Other (Specify) _____	

4. ALL BEGINNING AND ENDING DATES OF AVAILABILITY OF MODIFIED REGULATIONS AND/OR MATERIAL ADDED TO THE RULEMAKING FILE (Cal. Code Regs. title 1, §44 and Gov. Code §11347.1)

OCTOBER 14-30, 2019

5. EFFECTIVE DATE OF CHANGES (Gov. Code, §§ 11343.4, 11346.1(d); Cal. Code Regs., title 1, §100)

<input type="checkbox"/> Effective January 1, April 1, July 1, or October 1 (Gov. Code §11343.4(a))	<input checked="" type="checkbox"/> Effective on filing with Secretary of State	<input type="checkbox"/> §100 Changes Without Regulatory Effect	<input type="checkbox"/> Effective other (Specify) _____
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6. CHECK IF THESE REGULATIONS REQUIRE NOTICE TO, OR REVIEW, CONSULTATION, APPROVAL OR CONCURRENCE BY, ANOTHER AGENCY OR ENTITY

<input type="checkbox"/> Department of Finance (Form STD. 399) (SAM §6660)	<input type="checkbox"/> Fair Political Practices Commission	<input type="checkbox"/> State Fire Marshal
<input type="checkbox"/> Other (Specify) _____		

7. CONTACT PERSON	TELEPHONE NUMBER	FAX NUMBER (Optional)	E-MAIL ADDRESS (Optional)
Samuel Ferris	(916) 229-3000	(916) 229-3055	sam.ferris@cdfa.ca.gov

8. I certify that the attached copy of the regulation(s) is a true and correct copy of the regulation(s) identified on this form, that the information specified on this form is true and correct, and that I am the head of the agency taking this action, or a designee of the head of the agency, and am authorized to make this certification.

SIGNATURE OF AGENCY HEAD OR DESIGNEE	DATE
Kevin Masuhara	12/6/19
TYPED NAME AND TITLE OF SIGNATORY	
KEVIN MASUHARA, DEPUTY SECRETARY	

For use by Office of Administrative Law (OAL) only

ENDORSED APPROVED

JAN 23 2020

Office of Administrative Law

CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE
Hydrogen Gas-Measuring Devices (3.39.)
CCR Title 4, §§ 4001 and 4002.9

December 9, 2019

FINAL TEXT OF THE REGULATION

Proposed additions to original text are single underlined,
and proposed deletions are ~~single strikethrough~~.

§ 4001. Exceptions.

The following regulations in Handbook 44 are not adopted or incorporated by reference:

1.10. General Code.

G-S.1.2. Remanufactured Devices and Remanufactured Main Elements.

G-T.1. Acceptance Tolerances.

(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;

2.20. Scales.

S.1.8.4. Customer's Indications.

N.3. Minimum Test Weights and Test Loads*.

UR.2.6.1 Vehicle Scales.

UR.3.7. Minimum Load on a Vehicle Scale.

3.30. Liquid-Measuring Devices.

N.4.1.1. Wholesale Devices Equipped With Automatic Temperature Compensating Systems.

3.31. Vehicle-Tank Meters.

UR.2.2. Ticket Printer; Customer Ticket.

3.32. Liquefied Petroleum Gas and Anhydrous Ammonia Liquid-Measuring Devices.

S.2.6. Automatic Temperature Compensation.

N.4.1.1. Automatic Temperature Compensation.

UR.2.3. Vapor Return Line.

3.33. Hydrocarbon Gas Vapor-Measuring Devices.

S.4.3. Temperature Compensation.

3.37. Mass Flow Meters.

S.1.3.1.1. Compressed Natural Gas Used as an Engine Fuel.

S.1.3.1.2. Liquefied Natural Gas Used as an Engine Fuel.

S.5.2. Marking of Equivalent Conversion Factors for Compressed Natural Gas.

S.5.3. Marking of Equivalent Conversion Factor for Liquefied Natural Gas.

UR.3.1.1. Marking of Equivalent Conversion Factors for Compressed Natural Gas.

UR.3.1.2. Marking of Equivalent Conversion Factor for Liquefied Natural Gas.

3.39. Hydrogen Gas-Measuring Devices.

Section 3.39. Hydrogen Gas-Measuring Devices - Tentative Code

A.2. Exceptions

(c). Devices used for dispensing a hydrogen gas with a hydrogen fuel index lower than 99.97 % and concentrations of specified impurities that exceed level limits.

A.4. Type Evaluation.

~~N.3. Test Drafts.~~

~~N.4.1. Master Meter (Transfer) Standard Test.~~

~~N.4.2. Gravimetric Tests.~~

~~N.4.3. PVT Pressure Volume Temperature Test.~~

~~N.6.1.1. Repeatability Tests.~~

T.2. Tolerances.

Table T.2.

~~T.3. Repeatability.~~

Appendix D. Definitions for:

Diesel Gallon Equivalent (DGE).

Gasoline Gallon Equivalent (GGE).

Remanufactured Device.

Repaired Device.

Remanufactured Element.

Repaired Element.

Note: Authority cited: Sections 12027 and 12107, Business and Professions Code. Reference: Section 12107, Business and Professions Code.

§ 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 ~~certificate of approval issued by the California Department of Food and Agriculture after successful type evaluation, 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. For example, a dispenser approved and marked with a 3.0 Accuracy Class has an allowable maintenance tolerance in Table 2 ranging from plus three (+3) percent to minus three (-3) percent.

EXAMPLE:

**THE ACCURACY CLASS OF THIS
DISPENSER IS 3.0 AND
REPRESENTS THE ACCURACY
OF THE DELIVERY EXPRESSED
AS A PLUS OR MINUS
PERCENTAGE OF THE
DELIVERED QUANTITY.**

~~N.3. Test Drafts.—The minimum test shall be one test draft at twice the declared minimum measured quantity and one test draft at approximately ten times the minimum measured quantity or 1 kg, whichever is greater. More tests may be performed over the range of normal quantities dispensed. (See T.3. Repeatability)~~

~~The test draft shall be made at flows representative of that during normal delivery. The pressure drop between the dispenser and the proving system shall not be greater than that for normal deliveries. The control of the flow (e.g., pipe work or valve(s) size, etc.) shall be such that the flow of the measuring system is maintained within the range specified by the manufacturer.~~

~~N.4.1. Master Meter (Transfer) Standard Test.—When comparing a measuring system with a calibrated transfer standard, the minimum test shall be one test draft at twice the declared minimum measured quantity and one test draft at approximately ten times the minimum measured quantity or 1 kg, whichever is greater. More tests may be performed over the range of normal quantities dispensed.~~

~~N.4.2. Gravimetric Tests.—The weight of the test drafts shall be equal to at least twice the amount delivered by the device at the declared minimum measured quantity and one test draft at approximately ten times the minimum measured quantity or 1 kg, whichever is greater. More tests may be performed over the range of normal quantities dispensed.~~

~~N.4.3 PVT Pressure Volume Temperature Test.—The minimum test with a calibrated volumetric standard shall be one test draft at twice the declared minimum measured quantity~~

and one test draft at approximately ten times the minimum measured quantity or 1 kg, whichever is greater. More tests may be performed over the range of normal quantities dispensed.

N.6.1.1. Repeatability Tests. Tests for repeatability should include a minimum of three consecutive test drafts of approximately the same size with no less than 1000 scale intervals (divisions), and be conducted under controlled conditions where variations in factors are reduced to minimize the effect on the results obtained.

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.

Accuracy Class	Application or Commodity Being Measured	Acceptance Tolerance	Maintenance Tolerance
2.0	Hydrogen gas as a vehicle fuel	1.5 %	2.0 %
3.0 ¹		2.0 %	3.0 %
5.0 ¹		4.0 %	5.0 %
10.0 ²		5.0 %	10.0 %

¹The tolerance values for Accuracy Classes 3.0 and 5.0 hydrogen gas-measured devices are applicable to devices installed prior to January 1, 2020.

²The tolerance values for Accuracy Classes 10.0 hydrogen gas-measured devices are applicable to devices installed prior to January 1, 2018.

T.3. Repeatability. — When multiple tests are conducted at approximately the same flow rate and draft size greater than 1000 scale intervals (divisions), the range of the test results for the flow rate shall not exceed 40% of the absolute value of the maintenance tolerance and the results of each test shall be within the applicable tolerance. See also Section 4002.9 — N.6.1.1. Repeatability Tests.

T.6. Tolerance – Minimum Measures Quantity (MMQ). The maximum error applicable to the minimum measured quantity is twice the applicable tolerance in Table T.2.

**Table T.2. Accuracy Classes and Tolerances for Hydrogen Gas-Measuring Devices
Used to Measure Hydrogen Gas as a Vehicle Fuel.**

<u>Accuracy Class.</u>	<u>Acceptance Tolerance.</u>	<u>Maintenance Tolerance.</u>
<u>2.0</u>	<u>1.5 %</u>	<u>2.0 %</u>
<u>3.0</u>	<u>2.0 %</u>	<u>3.0 %</u>
<u>5.0</u>	<u>4.0 %</u>	<u>5.0 %</u>
<u>7.0</u>	<u>5.0 %</u>	<u>7.0 %</u>
<u>10.0</u>	<u>5.0 %</u>	<u>10.0 %</u>

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.

Note: Authority cited: Sections 12027 and 12107, Business and Professions Code. Reference: Section 12107, Business and Professions Code.