



CALIFORNIA DEPARTMENT OF
FOOD & AGRICULTURE

Karen Ross, Secretary

August 20, 2020

DMS NOTICE
D-20-04
Discard: Retain

TO: WEIGHTS AND MEASURES OFFICIALS

SUBJECT: Submitting Test Data on Hydrogen Gas-Measuring Devices

This Notice replaces Division of Measurement Standards (DMS) Notice D-17-3, to reference a new regulation adopted in 2020 and update contact information. Please remove DMS Notice D-17-3 from your files.

DMS seeks test data for hydrogen gas-measuring devices (hydrogen dispensers) from counties with open retail hydrogen stations. Currently, there are 43 retail stations operating throughout the state, with more scheduled to open soon. See the California Fuel Cell Partnership website for a complete list on open stations and stations under construction: <http://cafcp.org/stationmap>.

DMS is aware that county staff currently “witness test” the examination of hydrogen dispensers conducted by service agents, but we still need the test data to ensure we get complete and accurate information to further refine California’s regulations, policies and guidelines for hydrogen fueling and hydrogen dispensers.

California’s original hydrogen regulation adopted in 2014 (California Code of Regulations, Title 4, Division 9, Chapter 1, Article 1, § 4002.9) widened the accuracy tolerance adopted in National Institute of Standards and Technology (NIST) Handbook 44, 3.39. Hydrogen Gas-Measuring Devices (accuracy class 2.0) and includes accuracy classes 3.0, 5.0 and 10.0 to ensure marketplace introduction and availability of the fuel. Subsequent data received from county witness testing was critical for DMS to convince the National Conference on Weights and Measures to change the accuracy class in NIST Handbook 44 to 7.0 and California’s ability to maintain the tighter tolerances (accuracy classes 2.0, 3.0, and 5.0) in its most recent hydrogen regulation adopted in January 2020. Any future amendments to NIST Handbook 3.39 will surely be reflective of test data submitted from California.



Specifically, DMS asks for test data on every hydrogen dispenser within your jurisdiction (initial verification and every annual inspection/test thereafter) until further notice. Any written format is acceptable provided it includes all of the following information:

- 1) Date of test and location of dispenser(s)
- 2) Dispenser model(s) and serial number(s)
- 3) Dispenser indicated mass of delivery
- 4) Corrected weigh scale mass indication (as determined by the standard weight applied)
- 5) Error of dispenser delivery as determined by the formula:
 - $\text{meter indication} - \text{standard} / \text{standard} \times 100 = \text{percent error of indicated delivery}$

Please email your test data to dms@cdfa.ca.gov and put "Hydrogen Dispenser Test Data" in the email subject line.

If you have any questions, please contact the Device Program Specialist assigned to your county or contact DMS at (916) 229-3000.

Sincerely,



Kristin Macey
Director

cc: Hyrum Eastman, County/State Liaison