

**CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE (CDFA)  
DIVISION OF MEASUREMENT STANDARDS (DMS)  
REGISTERED SERVICE AGENCY (RSA) ADVISORY COMMITTEE  
CONFERENCE MEETING  
October 25, 2023  
9:00 a.m. – 12:00 p.m.**

**MEETING MINUTES**

**Minutes are considered DRAFT until approved  
by the RSA Advisory Committee**

**A. CALL TO ORDER**

Lucian Stacy, Committee Chair, called the meeting to order at 9:13 a.m. The meeting was held both in-person and remotely using Zoom.

**B. ROLL CALL OF MEMBERS**

Lucian Stacy took roll call. Membership attendance is reported below. Lucian Stacy established that there was a quorum of committee members.

**Committee Members Present (In-person):**

Lucian Stacy  
Steven Cook

**Committee Members Present (Zoom):**

Lynn Carmichael  
Breanne Matsuura  
Joseph Lundeen

**Committee Members Absent:**

Chris Gate  
Lucian noted that one member position remains vacant (RSA Customer/Client).

**CDFA-DMS:**

Kristin Macey, CDFA-DMS  
Clark Cooney, CDFA-DMS  
Samuel Ferris, CDFA-DMS  
Cameron Perez, CDFA-DMS

**Other Participants:**

Juan Lopez, Mark Johnson

**Presenter(s):**

Kristin Macey, CDFA-DMS

**C. APPROVAL OF PRIOR MEETING MINUTES**

Lucian Stacy asked committee members if there were any comments or edits to the draft minutes of the meeting held on June 14, 2023. Having heard none, he requested a motion to approve the meeting minutes.

Vote: Committee members voted to approve the meeting minutes of June 14, 2023.

| Name             | Vote | Comment |
|------------------|------|---------|
| Lynn Carmichael  | Yea  | Motion  |
| Steven Cook      | Yea  | Second  |
| Chris Gate       | --   | Absent  |
| Joseph Lundeen   | Yea  |         |
| Breanne Matsuura | Yea  |         |
| Lucian Stacy     | Yea  |         |

**D. REPORTS AND INFORMATION (Informational)****1. DMS Updates. (Kristin Macey)**

- a. Bagley-Keene Open Meetings Act updates. A trailer bill was passed in July 2023 to provide interim meeting requirements until December 31, 2023. Senate Bill 544 was signed into law to take effect January 1, 2024. Kristin Macey has requested CDFA to provide clarification and information on how SB 544 will impact boards and committees. Her current understanding of the bill is that, among other things, the requirement to have a majority of committee members at the physical location may be reinstated. Considering this, DMS intends to offer another committee meeting before the end of December 2023.
- b. CDFA-DMS personnel changes. Samuel Ferris to resume duties as liaison to the RSA Advisory Committee. Matthew Douglas, CDFA-DMS Special Investigator, recently promoted to Supervising Special Investigator for statewide device enforcement effective November 1, 2023. Demielle Noll-Tennin, CDFA-DMS Laboratory Assistant, recently promoted to Measurement Standards Specialist I, in the state Metrology Laboratory. Kristin Macey also announced that she will be retiring at the end of this year.
- c. CDFA Metrology Laboratory Success Story. Kristin Macey announced that CDFA-DMS Metrology Laboratory completed its audit by the National Voluntary Laboratory Accreditation Program (NVLAP) in July 2023. NVLAP is an accrediting body administered by the National Institute of Standards and Technology (NIST). She reported that the state laboratory passed the audit with no deficiencies.

- d. Committee Appointments. CDFA reappointed Lynn Carmichael as a member of the RSA Advisory Committee on October 1, 2023, for a three-year term.
- e. Surveys. CDFA-DMS has conducted two of three planned surveys. Results of the Predominance Survey and County Survey of RSA compliance will be presented as items on the agenda. A third statewide survey of RSAs will include a comprehensive, in-person office visit and “boots-on-the-ground” survey to review registration requirements, agents employed, metrology certificates of standards, and a field visit to observe a service agent performing their duties.
- f. Testing Electric Vehicle Charging Stations (EVSE). CDFA-DMS will present to California Energy Commission (CEC) December 18, 2023, requesting \$1 million to purchase additional field test standards for AC and DC electric charging stations. A Berkley University study, “Reliability of Open Public Electric Vehicle Direct Current Fast Chargers” showed that there were more broken chargers (offline and unavailable) than there were available for use.

#### **E. OLD BUSINESS (Discussion/Action by Committee)**

1. Review List of California Code of Regulations (CCR) Exceptions (CCR Section 4001) and CCR Additions (CCR Section 4002). (Kristin Macey)

Kristin Macey introduced a new document to track committee recommendations regarding device requirements adopted in Title 4 of the California Code of Regulations Sections 4001 and 4002.

- a. Title 4 CCR Section 4002.7. (a) Farm Milk Tanks (NIST Handbook 44, Section 4.42.) requires a farm milk tank to be calibrated upon installation or relocation and a volumetric chart made before testing it.

Discussion: Kristin Macey reported that a modern method to measure milk is to load it in a truck tank and weigh it on a vehicle scale to determine volume of milk sold. Lucian Stacy asked the committee how often this happens. He recommended that the counties (California county weights and measures jurisdictions) comment on how this is done. Steven Cook suggested conducting a survey. Joseph Lundeen reported many dairies in his county have closed. Using the county annual report 2021/22, Kristin Macey showed the committee that regulated milk tanks are registered in the counties of Fresno, Kings, Marin, Merced, and Tulare. Kristin Macey asked the committee what questions to include in the survey. Lucian Stacy suggested asking counties how many inspections occur and are there any placed in service reports for the last five years. Lynn Carmichael asked about the effects of temperature. Kristin Macey made a point of correction and noted that a farm milk tank inspection frequency is on initial installation with annual visual inspection thereafter (4 CCR 4070). Lucian Stacy asked if there is an inspection checklist and is it standardized throughout the state. Lynn Carmichael suggested asking counties if an annual visual inspection is still

needed and whether they still do them. Kristin Macey requested to add a question to the survey asking whether a volume chart is prepared prior to testing the tank.

Vote: Committee members voted to retain CCR Section 4002.7. (a).

| Name             | Vote    | Comment |
|------------------|---------|---------|
| Lynn Carmichael  | Yea     | Second  |
| Steven Cook      | Yea     |         |
| Chris Gate       | --      | Absent  |
| Joseph Lundeen   | Yea     | Motion  |
| Breanne Matsuura | Yea     |         |
| Lucian Stacy     | Abstain |         |

Along the same item of discussion, Joseph Lundeen made a motion to develop a survey of affected counties that register farm milk tanks to see if initial inspections and annual visual inspections are being done, whether a volume chart is created upon installation or relocation of a farm milk tank, and whether counties have a checklist or other standardized form used during the initial inspection or annual visual inspections.

Vote: Committee members voted to develop the farm milk tank survey.

| Name             | Vote | Comment |
|------------------|------|---------|
| Lynn Carmichael  | Yea  |         |
| Steven Cook      | Yea  |         |
| Chris Gate       | --   | Absent  |
| Joseph Lundeen   | Yea  | Motion  |
| Breanne Matsuura | Yea  | Second  |
| Lucian Stacy     | Yea  |         |

b. Title 4 CCR 4002.9. Hydrogen Gas-Measuring Devices (NIST Handbook 44, Section 3.39.) includes various additional device requirements for hydrogen fueling devices.

Discussion: Kristin Macey reported that CDFA-DMS adopted regulations in 2014 and again in 2018 and has recently been working with the California Air Resources Board to adopt additional device test requirements for safety protocols. Lucian Stacy, Lynn Carmichael, and Joseph Lundeen recommended to “table” (retain) this section until a later date.

Vote: Committee members voted to “table” (retain) CCR Section 4002.9 including the exceptions in CCR Section 4000 for (3.39.) Hydrogen Gas-Measuring Devices.

| Name             | Vote | Comment |
|------------------|------|---------|
| Lynn Carmichael  | Yea  | Motion  |
| Steven Cook      | Yea  |         |
| Chris Gate       | --   | Absent  |
| Joseph Lundeen   | Yea  | Second  |
| Breanne Matsuura | Yea  |         |
| Lucian Stacy     | Yea  |         |

c. Title 4 CCR 4002.11. Electric Vehicle Fueling Systems (EVFS) (NIST Handbook 44, Section 3.40.) removed the Tentative Code status and included various additional device requirements for electric vehicle fueling systems. Section 3.40. of NIST Handbook 44 is now permanent code and CDFA-DMS will synchronize its requirements with the requirements in NIST Handbook 44.

Lucian Stacy and Lynn Carmichael agreed to “table” or retain this section. Lynn Carmichael commented about issues with accuracy and that electric vehicle drivers do not always know the device markings, sealing provisions, or when the device was calibrated. Lucian Stacy added that electricity is a non-liquid, invisible fuel. Kristin commented that Tesla does not agree their devices need a display in compliance with the EVFS regulation. Tesla has a DC EVFS that other car manufacturers have adopted nationally. The National Conference on Weights and Measures is considering pushing up DC device enforcement dates (compared to California’s adopted DC device enforcement date).

Lucian Stacy stated that the test standard was very expensive and large companies are installing and placing their own devices into service. Joseph Lundeen estimated about \$200,000 to purchase test standards. Juan Lopez, Orange County Office of Weights and Measures, said that Orange County weights and measures officials have been taking enforcement on unapproved devices based on public complaints. Lucian asked if Orange County has a test standard, and Juan confirmed that they do. Orange County needs to use an app, P-card, or petty cash to activate the device.

The devices typically pass accuracy testing but the biggest issues they encounter are with labeling and marking requirements, RSA notification, and sealing. Lucian Stacy identified that payment to initiate the device is a barrier to testing it. Breanne Matsuura has similar experiences in Sacramento County. Comparatively, for testing hydrogen devices, the owner authorizes the RSA or official to collect hydrogen fuel at the owner’s expense.

Joseph Lundeen commented that he will use a newly designed AC and DC emulator for testing purposes, and his county will absorb the cost to test an electric vehicle fueling system. He stated that for CNG or LNG dispenser testing, the station owner absorbs the cost in his county. For hydrogen devices, the owner coordinates with the RSA and county official and absorbs the cost to collect hydrogen. Kristin Macey highlighted the device registration fees associated with EVFS in Business and Professions Code Section 12240 (f) and (t).

Vote: Committee members voted to “table” (retain) CCR Section 4002.11 including exceptions in CCR 4001 for (3.40.) Electric Vehicle Fueling Systems and the definition of “Electricity as Vehicle Fuel.”

| Name             | Vote | Comment |
|------------------|------|---------|
| Lynn Carmichael  | Yea  | Motion  |
| Steven Cook      | Yea  |         |
| Chris Gate       | --   | Absent  |
| Joseph Lundeen   | Yea  | Second  |
| Breanne Matsuura | Yea  |         |
| Lucian Stacy     | Yea  |         |

## 2. DMS Survey Results:

a. Predominance Survey Results. – Kristin Macey shared the results of this survey and are posted on CDFA-DMS Meetings webpage under today’s meeting date at:  
<https://www.cdfa.ca.gov/dms/meetings.html>

CDFA-DMS concluded that counties are interpreting G-UR.4.1. (NIST Handbook 44, Section 1.10. General Code.) in multiple ways and enforcement actions are inconsistent. Kristin Macey suggested this could be addressed by a DMS Notice and pointed out that the committee voted unanimously to address predominance via rulemaking. Lucian Stacy asked if a DMS Notice precludes a rulemaking action. Kristin Macey explained that DMS can issue a Notice prior to a rulemaking and that the DMS Notice would need to be reviewed by CDFA Legal before it is issued. Lucian Stacy asked what the tolerance is for a fuel pump. Kristin Macey explained the tolerance is plus or minus 6 cubic inches. Clark Cooney pointed out there are 1,155 cubic inches in a 5-gallon draft and the maintenance tolerance is plus or minus 6 cubic inches per draft.

Lucian Stacy estimated that predominance up to 6 cubic inches would benefit the owner by about \$0.13 (per five-gallon draft). Lynn Carmichael observed that this tolerance is greater than a deli scale’s and it should be a violation. Samuel Ferris pointed out that question 1 of the survey reported a high rate of county participation and question 2 or 3 reported that counties do not observe predominance frequently. Kristin Macey stated that counties don’t always follow-up at a service station after an RSA has been there. It may take the county a year to go back out to the same station.

Steven Cook mentioned the temperature of the fuel may affect the tolerance. Clark Cooney reported that as far back as the 1970’s, studies have shown that the temperature variation of fuel would not have that much impact on the reading (indication of fuel delivered). Kristin Macey shared the California Energy Commission’s AB 868 Fuel Delivery Temperature Study (2008)<sup>1</sup> with the committee. The result of that study is that in California there is no significant difference due to fuel temperature variations throughout the year.

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<sup>1</sup> CEC Fuel Temperature Study Commission Report, March 2009:  
[https://www.researchgate.net/publication/305905448\\_Fuel\\_Delivery\\_Temperature\\_Study](https://www.researchgate.net/publication/305905448_Fuel_Delivery_Temperature_Study)

Vote: Committee members voted in favor of issuing a DMS Notice with considerations for environmental conditions and other factors.

| Name             | Vote | Comment |
|------------------|------|---------|
| Lynn Carmichael  | Yea  | Motion  |
| Steven Cook      | Yea  |         |
| Chris Gate       | --   | Absent  |
| Joseph Lundeen   | Yea  | Second  |
| Breanne Matsuura | Yea  |         |
| Lucian Stacy     | Yea  |         |

b. County Survey of RSA Compliance Results. – Kristin Macey shared the results of the survey and are posted on CDFA-DMS Meetings webpage under today's meeting date at: <https://www.cdfa.ca.gov/dms/meetings.html>

Lucian Stacy commented that there is a lot of useful information in this survey.

3. Service Agent License Examinations: Continued Outreach to Other States. – Kristin Macey reached out to six states: Arizona, Iowa, Illinois, Louisiana, Michigan, and Washington. A subgroup of the RSA Advisory Committee formed to look at the exams and includes Lucian Stacey, Lynn Carmichael, and Joseph Lundeen. Kristin Macey will support the subgroup by providing requested information. Issues to consider are: in-person or online exams (many are online), the technicality and difficulty of questions, and the number of times one may take the exam. One state offers a lifetime license after passing their exam.

## **F. NEW BUSINESS**

1. No Comments received for new business.

## **G. PUBLIC COMMENT ON ITEMS NOT ON THE AGENDA**

1. Kristin Macey requested that the committee address alternatives to the use of lead and wire security seals. She explained that Santa Clara County officials had been commonly using lead and wire seals until the county's health department determined that lead dust is present with the use of these seals. The county is able to mitigate exposure with good hygiene and common sense.

## **H. NEXT MEET AGENDA**

1. Lucian Stacy asked for any other public comments and received none.

## **I. ADJOURNMENT**

1. Lucian Stacy asked to adjourn the meeting.

Vote: Committee members voted to adjourn the meeting at 11:52 a.m.

| Name             | Vote | Comment |
|------------------|------|---------|
| Lynn Carmichael  | Yea  |         |
| Steven Cook      | Yea  |         |
| Chris Gate       | --   | Absent  |
| Joseph Lundeen   | Yea  | Motion  |
| Breanne Matsuura | Yea  | Second  |
| Lucian Stacy     | Yea  |         |

Respectfully submitted:

Committee Chair, Lucian Stacy  
CDFA-DMS RSA Advisory Committee Chairman