National Hydrogen and Fuel Cell Codes and Standards Coordinating Committee (NHFCCSCC)

Wednesday, April 3, 2024
TIME: 2:00 – 3:00 pm (Eastern Standard Time)

Minutes

Attendees

Connor Dolan	**Sara Marxen**	**Nick Barillo**
Chenai Maguwah	**Manuel Hernandez**	**Brian Ehrahart**
Kelvin Hecht	**Tobias Hanson**	**Trey White**
Mike Force	**Owen Hopkins**	**Jeff Puckett**
Juana Williams	**Chris LaFleur**	**Mike Steele**
Stella Papasavva	**Norm Newhouse**	**Jennifer Hamilton**
Rob Early	**Christine Watson**	**Svetlana Ulemek**
Andrew Adkins	**Mark Siira**	**Christina Daniels**
Ian MacIntire	**Will James**	**Frank Wolak**
Jennifer Gangi	**Eric Prause**	

I. Welcome and Housekeeping Items

- FCHEA's anti-trust guidelines were reviewed.
- The meeting agenda was approved as written.
- The meeting minutes from the previous meeting that took place Wednesday March 6, 2024, were approved as written.

Connor Dolon introduced new FCHEA staff member, Chenai Maguwah, who provided a summary of her background. Chenai Maguwah can be reached by email at cmaguwah@fchea.org

II. DOE/HQ Update — Christine Watson

- The 2024 Annual Merit Review and Peer Evaluation Meeting (AMR) will take place May 6-9, 2024, in Arlington, VA. Registration is open. Reminder that if you have been invited as reviewer, you will need to register as a reviewer, and accordingly register for AMR using your reviewer discount code.

III. Codes &Standards Events and Fuel Cell Safety Information — Karen Quackenbush

https://www.hydrogenandfuelcellsafety.info/s/FCHEA-Regulatory-Matrix-Markup-March-31-2024.pdf

- Matrix: Newest version (March 31, 2024) is now available for review. It uses redline/strikeout to depict progress over the last quarter. If you identify information in need of updating or have questions about any of the activities, please contact kquackenbush@fchea.org

IV. Global Technical Regulations — Ian MacIntire

- The NHTSA continues to work on its effort but has still not yet published its NPRM. Now that the GTR is established there is an active work within NHTSA to align with the GTR. Once an NPRM is issued, that will open a comment period, potentially followed by a final rule.

V. Codes and Standards Organization Updates

Institute of Electrical and Electronics Engineers — Mark Siira

- There is ongoing activity for the IEEE 1547 series of standards. The main committee meets virtually once every two months. A face-to-face meeting will be held in Boston during the week of June 10th. There is work underway by IEEE to reach out to more industry players. Mark is working on the interaction between energy and water. Meetings are being organized later in the month of April. Details for how to sign up will be shared at a later date.

International Electrotechnical Commission IEC TC 105 — Kelvin Hecht

- There are no additional updates for this month.

ISO/TC 197, Hydrogen technologies — Karen Quackenbush/ Jennifer Hamilton

- ISO/TC 197/WG 22, *Gaseous hydrogen fueling station hoses* has been meeting to address remaining comments from circulation of the Committee Draft (CD); ISO/CD 19880-5, *Gaseous hydrogen Fuelling stations, Part 5: Dispenser hoses and hose assemblies*. The Working Group (WG) identified a need for hose testing to confirm whether the tests in ISO/CD 19880-5 will identify hoses that may fail in service, as well as evaluate whether a proposed “Cold Gas in Warm Hose” test is capable of identifying future problems. The WG plans to register a Draft International Standard (DIS) in May.

- ISO/TC/197/WG 23, *Gaseous hydrogen fueling station fittings* has been meeting to resolve comments from the CD. Two virtual meetings were held in March. Two more are scheduled over the next two months. A DIS will then be prepared. Before the DIS can be registered, a WG 23 Internal Ballot will be circulated requesting approval to restart the project.

- ISO/TC/197/WG5, *Gaseous hydrogen land vehicle refuelling connection devices* will meet virtually April 30, and hold a hybrid meeting on May 17 in Boston, MA.

- A Systematic Review Ballot is to open on ISO 19880-1 *Gaseous hydrogen Fuelling stations, Part 1: General requirements* for revision has concluded. The consultation sought to collect comments from members regarding the Draft New Work Item Proposal (NP) and Outline for the Revision of ISO 19880-1. This ballot also prompts invitation for

National Standardization Bodies (NSBs) to nominate up to two experts each to participate in ISO/TC197/AHG 2. These results will serve as a basis for the Ad Hoc Group 2 (AHG2), led by Jennifer Hamilton, to initiate a discussion and draft its recommendations for the pathway forward to address gaseous and liquid hydrogen refueling stations. The comments received will be addressed and resolved during an upcoming AHG2 meeting.

- ISO/TC197/WG 24 *Gaseous hydrogen – Fuelling protocols for hydrogen-fuelled vehicles*, is holding a hybrid meeting, May 14-16 in Boston, MA

National Fire Protection Association (NFPA) **Chris LaFleur**

- NFPA 2, *Hydrogen Technologies Code*: The First Draft meeting is set for April 8-11 in Indianapolis, IN. Nearly 300 public inputs/comments have been received. It is anticipated that the committee will need two more days of virtual meetings at the end of April to complete adjudication of the comments.

- The feedback that came up with NFPA 55, *Compressed Gases and Cryogenic Fluids Code* relates to when NFPA 2 applies to a gas that is not 100% hydrogen. Right now, the NFPA 2 scope is essentially for pure hydrogen. There has been some discussion to determine if that should be less, and if so, which NFPA code should apply. Right now, it points to NFPA 55, but the scope of NFPA 55 is typically for laboratory uses, whereas NFPA 2 which is for hydrogen as a fuel / energy commodity. NFPA 55 has a task group to figure this issue out. There are other issues with the designation between the two standards, for example, if hydrogen is mixed with a toxic gas.

- NFPA 2 also will be adding in references to other standards related to explosion prevention / protection; NFPA 68, *Standard on Explosion Protection by Deflagration Venting* and NFPA 69, *Standard on Explosion Prevention Systems*
- The NFPA 2 First Draft will be posted by October 25, 2024, for public comments.

International Codes Council (ICC) **Mark Fasel**

- No update this month.

Society of Automotive Engineers (SAE) **Mike Steele**

Task Force	*Document*	*	*Title*	*Date*	*Status*
Interface	J2600_201510	S	Compressed Hydrogen Surface Vehicle Fueling Connection Devices	21-Oct-15	Being revised in conjunction with ISO 17268
Interface	J2601_202005	S	Fueling Protocols for Light Duty Gaseous Hydrogen Surface Vehicles	29-May-20	Being revised
Interface	J2601/4	TIR	Ambient Temperature Variable and Fixed Orifice Fueling Protocol for Light Duty Gaseous Hydrogen Surface Vehicles	21-Nov-16	Reconciliation complete, to SAE for reballot
Interface	J2799_201912	S	Hydrogen Surface Vehicle to Station Communications Hardware and Software	13-Dec-19	to MVC for approval
Safety	J1766_201401	RP	Recommended Practice for Electric, Fuel Cell and Hybrid Electric Vehicle Crash Integrity Testing	10-Jan-14	Revised - Action required. Awaiting GTR 13 Phase 2
Safety	J2990/1_201606	RP	Gaseous Hydrogen and Fuel Cell Vehicle First and Second Responder Recommended Practice	3-Jun-16	Voting closed. Comments need to be addressed.
Safety	J3294	TIR	Guidance for Material Selection for use in Hydrogen Systems	20-Apr-23	Soliciting comments

CSA **Sara Marxen**

Technical Committee Meetings
• If you are interested in joining hydrogen standards development committees with CSA, please contact Iris Monner (iris.monner@csagroup.org) • If you are interested in joining fuel cell standards or hydrogen generation development committees with CSA, please contact Mark Duda (mark.duda@csagroup.org) • CSA Group's U.S. Committee Week is planned for October 21-24 in Philadelphia, PA.

Active Projects	
Designation/Title	**Status**
HGV 5.2, Compact hydrogen fueling systems	This project is to develop a NEW standard for Compact Hydrogen Fueling Systems (HGV 5.2). The standard was published in March 2024!
HGV 5.1, Residential hydrogen fueling appliances	This project is to develop a NEW standard for Residential fueling appliances. Project was kicked off in 2022, however content development has stalled.
HGV 4.3, Test methods for hydrogen fueling parameter evaluation	This project is a revision of an existing standard to develop text to transition from a testing standard to a standard that can be used for certification. The document is being prepared for Technical Committee Ballot in early 2024.
HGV 4.8, Compressors	This project is a revision of an existing standard to reflect new technology. Content development is on hold.
CHMC 1, Test methods for evaluating material compatibility in compressed	This project is to revise the existing edition of CHMC 1 to address updates in testing methods and clarify requirements. Content

hydrogen applications - Metals	development continues with monthly meetings. Please contact Sara Marxen (sara.marxen@csagroup.org) if interested in joining this work.
B107, Enclosed Hydrogen Equipment	This project is to develop a new standard that will address safety requirements related to hydrogen equipment use inside an enclosure. The committee is dispositioning Public Review and CSA Editorial comments.
B401.3, Hydrogen vehicle and trailer maintenance facilities code	This project is a new Canadian code that will be aligned with existing maintenance facility requirements in CSA B401.1 (natural gas) and existing hydrogen requirements – BNQ 1784-000 and NFPA 2 and 30A. Please contact Iris Monner (iris.monner@csagroup.org) if interested in joining this work.
FC 62282-2-100 * C22.2 No. 62282-2-100, Fuel cell/water electrolysis module	The committee continues to meet to adopt IEC 62282-2-100 - *Fuel Cell Technologies – Part 2-100: Fuel cell modules – Safety* for US and Canada and expanding the scope of the adoption to include water electrolysis modules. Contact Mark Duda (mark.duda@csagroup.org) for additional information.

Compressed Gas Association (CGA) — Rob Early

Updates from last month's report are highlighted.

Status of current and future publications:

Standard	Current edition	Status
CGA G-5, *Hydrogen*	8th (2017)	The ANS committee has resolved all proposed changes. Next step is a 45-day public review. https://portal.cganet.com/WorkItem/Details.aspx?id=22-019
CGA G-5.3, *Commodity specification for hydrogen*	7th (2017)	Deadline to submit proposed changes for next edition was 5/1/2023. A total of 7 PCs have been submitted. A PC resolution meeting was scheduled for 3 November 2023. Updates are now going through staff review. https://portal.cganet.com/Publication/Workspace/Outline.aspx?work_id=22-013
CGA G-5.4, *Standard for hydrogen piping systems at user locations*	6th (2019)	Deadline to submit proposed changes for next edition is 12/22/2024. https://portal.cganet.com/Publication/Workspace/Outline.aspx?work_id=24-54
CGA G-5.5, *Hydrogen vent systems*	3rd (2014)	Deadline to submit proposed changes for next edition is 03/04/2026. https://portal.cganet.com/Publication/Workspace/Outline.aspx?work_id=26-3 The task force met 19 and 20 October 2023 to review test results.

Standard	Current edition	Status
CGA G-5.6, *Hydrogen pipeline systems*	1st (2005 – reaffirmed 2013)	Deadline to submit proposed changes for next edition is 8/1/2023. https://portal.cganet.com/Publication/Workspace/Outline.aspx?work_id=19-018
CGA H-3, *Standard for cryogenic hydrogen storage*	3rd (2019)	This publication is in staff review prior to Council Ballot. After council approval, H-3 will be sent for 45-day public review after council approval to move through the ANS process.
CGA H-4, *Terminology associated with hydrogen fuel technologies*	3rd (2020)	Deadline to submit proposed changes for next edition is 12/1/2024. However, all the content has been added to the updated version of CGA G-5. Once CGA G-5 has been issued, CGA H-4 will be retired. For updates use the following link: https://portal.cganet.com/Publication/Workspace/Outline.aspx?work_id=24-59
ANSI/CGA H-5, *Standard for bulk hydrogen supply systems*	3rd (2020)	The deadline to submit proposed changes for the next edition is 2/26/2024. https://portal.cganet.com/Publication/Workspace/Outline.aspx?work_id=24-010
CGA H-10, *Combustion safety for steam reformer operation*	2nd (2018)	Deadline to submit proposed changes for next edition is 9/21/2024. https://portal.cganet.com/Publication/Workspace/Outline.aspx?work_id=23-038
CGA H-11, *Safe start-up and shutdown practices for steam reformers*	2nd (2020)	Deadline to submit proposed changes for next edition is 8/11/2025. https://portal.cganet.com/Publication/Workspace/Outline.aspx?work_id=25-30
CGA H-12, *Mechanical integrity of syngas outlet systems*	1st (2016)	Deadline to submit proposed changes for next edition is 6/1/2024. https://portal.cganet.com/Publication/Workspace/Outline.aspx?work_id=21-016
CGA H-13, *Hydrogen pressure swing adsorber (PSA) mechanical integrity requirements*	1st (2017)	Council ballot due 21 Aug 2023, IHC Association approvals due 18 Sept 2023. Pending no comments, estimated publish date by the end of September. https://portal.cganet.com/Publication/Workspace/Outline.aspx?work_id=22-027
CGA H-14, *HYCO plant gas leak detection and response practices*	1st (2018)	Deadline to submit proposed changes for next edition is 12/8/2023. https://portal.cganet.com/Publication/Workspace/Outline.aspx?work_id=23-045
CGA H-15, *Safe catalyst handling in HYCO plants*	1st (2020)	Deadline to submit proposed changes for next edition is 9/1/2025.

Standard	Current edition	Status
		https://portal.cganet.com/Publication/Workspace/Outline.aspx?work_id=25-59
CGA H-17, *Small scale hydrogen production and delivery*	New publication not released yet	Council ballot due 9 Aug 2023, IHC Association approvals due 7 Sept 2023. Pending no comments, estimated publish date by the end of September. https://portal.cganet.com/WorkItem/Details.aspx?id=18-093
CGA P-28, *OSHA process safety management and EPA risk management plan guidance document for bulk liquid hydrogen supply systems*	5th (2022)	Deadline to submit proposed changes for next edition is 08/01/2027. https://portal.cganet.com/Publication/Workspace/Outline.aspx?work_id=25-49
CGA PS-31, *Position statement on cleanliness for proton exchange membranes hydrogen piping / components*	1st (2007 – reaffirmed 2019)	Deadline to submit proposed changes for next edition is 6/12/2025. https://portal.cganet.com/Publication/Workspace/Outline.aspx?work_id=25-16
CGA PS-33, *Position statement on the use of LPG or propane tanks as compressed hydrogen storage buffers*	1st (2008 – reaffirmed 2020)	Deadline to submit proposed changes for next edition is 12/10/2026. https://portal.cganet.com/Publication/Workspace/Outline.aspx?work_id=25-41
CGA PS-46, *Position statement on roofs over hydrogen storage systems*	1st (2017)	The ad hoc committee will meet on 8 August 2023to resolve public comments and update PS-46. For updates see the link below: https://portal.cganet.com/Publication/Workspace/Outline.aspx?work_id=23-012
CGA PS-48, *Position statement on clarification of existing hydrogen setback distances and development of new hydrogen setback distances in NFPA 55*	1st (2016)	The ad hoc committee met on 8 August 2023 to resolve public comments and update PS-48 to point to NFPA 2 for hydrogen instead of pointing to NFPA 55. For updates see the link below: https://portal.cganet.com/WorkItem/Details.aspx?id=21-062
PS-69, *Liquid Hydrogen Supply Systems Separation Distances*	1st (2022)	CGA has developed a position statement pointing users to the new liquid hydrogen system distances in NFPA 2:2023. The position statement covers the process of requesting a variance to use the numbers from the NFPA 2 section of the NFPA web site. PS-69 is free for

Standard	Current edition	Status
		downloading at https://www.cganet.com/wp-content/uploads/PS-69_1.pdf
CGA work item 21-127, *Transfer and unloading of hydrogen at near-consumer use points*	New publication not released yet	Develop a new standard to update traditional hydrogen delivery practices for industrial users to improve practices for retail applications.
CGA work item 21-128, *Noise from hydrogen venting and hydrogen systems operations*	New publication not released yet	Develop a new standard to reduce the noise from hydrogen system operations, including venting, particularly at retail applications where hydrogen system noise is greater than ambient noise. The task force held a meeting November 1 and is working on developing content for the publication.
CGA H-7, *Hydrogen system best practices*	New publication	Develop a new standard to capture recommended best practices for handling hydrogen, filling containers, starting up systems, maintaining hydrogen systems, and similar topics to ensure safe practices for those new to the hydrogen space and to share best practices from those already experienced with hydrogen. The standard has been released.
CGA work item 22-116, *Hydrogen separation distances*	New publication not released yet	CGA is developing a globally harmonized standard on the methodology for developing separation distances between hydrogen systems and exposures. The standard will provide details on mitigation techniques for reducing required distances, particularly in near-consumer locations (such as vehicular fueling) where room is limited. The working group has a first outline and continues to add content. The JWG has met multiple times via web conferences and met in person February 6-7 to continue work on the draft. Future web conferences are scheduled for 3 April 2024 and 2 May 2024.
CGA work item 22-127, *Hydrogen education plan*	New publication not released yet	CGA is developing a globally harmonized standard on hydrogen emergency response and safe hydrogen handling training. The JWG met on 17 April 2023, 11 May 2023, 9 June 2023 27 June 2023, 8 August 2023, and 15 September 2023.

Upcoming events:

CGA has established a new hydrogen membership category for those interested in hydrogen activities and not just the whole range of industrial gases. The new membership category has a lower fee structure. More details can be found at https://www.cganet.com/cga-announces-formation-of-hydrogen-membership/ . Those who are interested are encouraged to review the material at the CGA web site https://www.cganet.com/membership/#hydrogen-membership or contact Rob Early at rearly@cganet.com . A list of CGA member companies, *including can* be found at https://www.cganet.com/about-us/cga-members/.

CGA has launched https://www.safehydrogenproject.org/ to grow awareness and access to standards and safety information. More details can be found at https://www.cganet.com/compressed-gas-association-announces-landmark-hydrogen-initiative/

CGA and other global industrial gas associations are developing joint working groups to establish consistent global positions on content in ISO/TC 197 and ISO/TC 197/SC 1 standards.

American Society for Testing & Materials (ASTM) **Chrstina Daniels**

- ASTM Update to add to the meeting minutes:
- ASTM D03.14 Subcommittee Ballot Closes 4/3/2024 – both standards below will move up to main committee D03 for ballot that should close end of May.
- ASTM D7606 Gaseous Sampling
- ASTM D7651 Weighing Particulate Filters

Upcoming in person meeting June 18, 2024, in Austin, TX. Register Here.

American Society of Mechanical Engineers (ASME) **Ray Rahaman**

- ASME Electrochemical Cell Stack Task Force: meets every other month. There is robust industry engagement. The Task Force is working through concerns with Code Case 3078 so that rules for ECS are clear.
- ASME plans to develop a mandatory appendix for ASME BPVC Section VIII to address requirements for ECS for electrolyzers and fuel cells. Anyone wishing to engage in this activity is asked to contact kquackenbush@fchea.org

VI. Discussion Topics

Center for Hydrogen Safety **Jennifer Hamilton**

- Application recently closed for the mentoring program at CHS.

Conference Dates: May 21-23, 2024
Location: Las Vegas, US

Topics include:

- Fundamental Safety Considerations and Best Safety Practices
- Regulations, Codes and Standards
- Incidents and Lessons Learned
- Blending Applications
- Safe Storage and Production

Gaseous Hydrogen: Safety Considerations (2 hours)
Learn about the unique properties of hydrogen, along with its hazards and crucial safety considerations.
Course credits: Earn 2 PDHs or 0.2 CEUs

Vent System Design (2 hours)
Explore vital design considerations for hydrogen vent systems during this insightful session.
Course credits: Earn 2 PDHs or 0.2 CEUs

NFPA 2 Hydrogen Technologies Code (4 hours)
Gain the basic knowledge needed to begin applying this code.
Course credits: Earn 4 PDHs or 0.4 CEUs

Learn more and register at: https://www.aiche.org/chs

Regulatory Matrix Review and Comment — **Karen Quackenbush**

California Station Implementation — **Ben Xiong**

California Div. of Measurement Standards/Fuel Quality / Metrology — **Andrew Adkins**

- Continuing routine sampling, except for particulate sampling.

Legal Metrology Standards Hydrogen Fuel Quality and Measurement — **Juana Williams**

U.S. Weights and Measures Standards Development Process

An overview of the status assigned to industry proposals to modify legal metrology standards for hydrogen gas-measuring devices used to refuel vehicles, which were addressed by the National Conference on Weights and Measures (NCWM) during its January 7-10, 2024, Interim Meeting held in New Orleans, Louisiana, are shown in the table below. The NCWM Specifications and Tolerances (S&T) Committee addressed a single proposal to include a device owner safety requirement in NIST Handbook 44 *Specifications, Tolerances, and Other Technical Requirement for Weighing and Measuring Devices*, Section 3.39. The NCWM Laws and Regulations (L&R) Committee addressed two separate fuel quality standard proposals to modify NIST Handbook 130 *Uniform Laws and Regulations in the Areas of Legal Metrology and Fuel Quality*, Section

IV. Uniform Regulations F. Uniform Fuels and Automotive Lubricants Regulation. The 2024 NCWM Interim Meeting Reports that include all three proposals under consideration will be available after April 15, 2024 in entirety (submitter, justification, links to associated materials, etc.) on the NCWM website available at: https://www.ncwm.com/publication-16.

These items will be addressed at two meeting in May. Regional meetings will be held May 6-9 in Cape Cod, MA and May 20-23 in Iowa.

Comments can be provided through July up until the annual meeting at that time.

NCWM Committee	**Agenda Item Status/Agenda Item No./Agenda Item Title**	**Submitter's Stated Purpose**	**Submitter's Proposed Modification to the Code**	**Preliminary NCWM Committee Findings** (Final January 2024 NCWM Interim Meeting Report due mid-April 2024)
S&T	**Developing** HGM-23.1 UR.3.8. Safety Requirement [This is the second year the proposal is being considered]	Add safety requirement for hydrogen gas measuring devices to NIST Handbook 44 Section 3.39.	Add a new nonretroactive user requirement paragraph UR.3.8. to read: ***UR.3.8. Safety Requirement – All hydrogen gas-measuring devices subject to this code shall maintain verification of testing demonstrating conformance with the latest version of SAE J2601 Fuel Protocols for Light Duty Gaseous Hydrogen Surface Vehicles, as determined by the latest version of ANSI/CSA HGV 4.3 "Test Methods for Hydrogen Fueling Parameter Evaluation. (Nonretroactive as of January 1, 20XX)***	The NCWM will assign developing status to the proposal while it awaits a report on data being collected by CARB and CADMS that demonstrates how verification of gaseous hydrogen vehicle refueling systems to the safety protocol (SAE J2601) is also relevant to the NIST Handbook 44 device performance requirements for the equipment's metrological parameters.
L&R	**Withdrawn** FLR-23.3	Add equivalent hydrogen quality standard, ISO 14687 to 2.20.	Modify Section 2 Standard Specification 2.20 as follows: **2.20. Hydrogen Fuel.** – Shall meet the latest version of SAE	The Committee, after hearing no support for the item and having not received any communication from

NCWM Committee	Agenda Item Status/Agenda Item No./Agenda Item Title	Submitter's Stated Purpose	Submitter's Proposed Modification to the Code	Preliminary NCWM Committee Findings (Final January 2024 NCWM Interim Meeting Report due mid-April 2024)
	Section 2.20. Hydrogen Fuel [This is the second year the proposal is being considered]	Amends NIST HB 130 Part IV. Uniform Regulations F. Uniform Fuels and Automotive Lubricants Regulation Section 2 Standard Specifications under 2.20.	J2719, "Hydrogen Fuel Quality for Fuel Cell Vehicles." **or ISO 14687 "Hydrogen fuel quality — Product specification".** (Added 2012) **(Amended 20XX)**	the submitter regarding their request to select one standard will withdraw the item. The Committee noted that withdrawing the item would not change the current status that hydrogen fuel shall meet the latest version of SAE J2719 *Hydrogen Fuel Quality for Fuel Cell Vehicles*.
L&R	**Voting** B2: FLR-24.2 2.9. Liquefied Natural Gas (LNG) Vehicle Fuel, 2.10. Compressed Natural Gas (CNG), and 2.XX. Compressed Natural Gas (CNG) Blended with Hydrogen B2: FLR-24.1 3.11.2.1.X. Identification of Grade and 3.12.2.X	Amend NIST Handbook 130 Part IV. Uniform Regulations F. Uniform Fuels and Automotive Lubricants Regulation Section 2 Standard Specifications under Sections 2.9 and 2.10 by replacing SAE J1616 and SAE J2699 with ASTM D8080 "Standard Specification for Compressed Natural Gas (CNG) and Liquefied Natural Gas (LNG) Used as a Motor Vehicle Fuel."	Modify Section 2.9 and 2.10 as follows: 2.9. Liquefied Natural Gas (LNG) Vehicle Fuel. – Shall meet the latest version of ~~**SAE J2699, "Liquefied Natural Gas (LNG) Vehicle Fuel."**~~ **ASTM D8080 "Standard Specification for Compressed Natural Gas (CNG) and Liquefied Natural Gas (LNG) Used as a Motor Vehicle Fuel."** 2.10. Compressed Natural Gas (CNG). – Shall meet the latest version of ~~**SAE J1616, "Recommended Practice for Compressed Natural Gas Vehicle Fuel."**~~ **ASTM D8080 "Standard Specification for**	The Committee did not hear support or opposition for the item, but recognized the proposal has merit, and therefore assigned the proposal Voting status. The L&R Committee worked further with the NCWM to correct the incorrect code references.

NCWM Committee	Agenda Item Status/Agenda Item No./Agenda Item Title	Submitter's Stated Purpose	Submitter's Proposed Modification to the Code	Preliminary NCWM Committee Findings (Final January 2024 NCWM Interim Meeting Report due mid-April 2024)
	Identification of Grade [A new proposal]	Amend NIST HB 130 Part IV. F. Section 2 by adding a new paragraph for ASTM D8487 "Standard Specification for Natural Gas, Hydrogen Blends for Use as a Motor Vehicle Fuel." Amend NIST HB 130 Part IV. F. Uniform Fuels and Automotive Lubricants Regulation Section 3 under 3.11 CNG and 3.12 LNG by adding labeling of grades to the method of sale for CNG and LNG.	**Compressed Natural Gas (CNG) and Liquefied Natural Gas (LNG) Used as a Motor Vehicle Fuel."** Include a new fuel quality requirement for CNG and hydrogen blended products to read: **2.XX. Compressed Natural Gas (CNG) Blended with Hydrogen. – Shall meet the latest version of ASTM D8487 "Standard Specification for Natural Gas, Hydrogen Blends for Use as a Motor Vehicle Fuel."** Modify to include proposed new grade labeling requirements in current HB 130 Part IV. F. Section 3. Classifications and Labeling for Sale under Section 3.11 Compressed Natural Gas (CNG) and 3.12 Liquefied Natural Gas (LNG) as follows: **3.11.2.1.X. Identification of Grade. – Each retail dispenser of CNG shall be labeled with an identification of the grade of the product.** **3.12.2.2.X. Identification of Grade. – Each retail dispenser of LNG shall be labeled with an identification of the grade of the product.**	

The 109th NCWM Annual Meeting will be held July 14 through 18, 2024 in Cleveland, Ohio. Agenda items intended for adoption during the July 2024 NCWM Annual Meeting must have achieved "V" voting status at the conclusion of deliberations on the January meeting. The NCWM S&T and L&R Committees can be contacted through the NCWM website available at: info@ncwm.com.

Prior to the July 2024 meeting there will be two regional weights and measures association meetings in May. The regional meetings will be the Northeastern Weights and Measures Association (NEWMA) Annual Meeting held May 6 through 9, 2024 in Cape Cod, Massachusetts and the Central Weights and Measures Association (CWMA) Annual Meeting held May 20 through 23, 2024 in Des Moines, Iowa. NEWMA S&T Committee contacts are available on NEWMA's website at: https://newma.us/Specifications-and-Tolerances-Committee and the L&R Committee contacts are available at: https://newma.us/Laws-and-Regulations-Committee. CWMA S&T Committee contacts are available on CWMA's website at: https://cwma.net/page-1075182 and the L&R Committee contacts are available at: https://cwma.net/page-1075179

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Comments on the proposals are encouraged in the standards development process and welcomed up through July 2024. NIST OWM plans to prepare and submit comments in a technical analysis of the proposals. Members on NIST sponsored USNWG on the Development of Commercial Hydrogen Measurements will also be notified of the proposals' latest status. If you have questions or comments regarding the USNWG or NIST OWM's work on hydrogen projects in the areas of U.S. device standards, test procedures, or hydrogen fuel specifications, please contact Juana Williams by email at: juana.williams@nist.gov or by telephone at (301) 975-3989.

VII. Open Discussion & Other Issues

- No updates currently.

VIII. Next Meeting

Wednesday, May 1st at 2:00 PM US Eastern
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