

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

Wednesday, May 2nd, 2012

TIME: 3:00 – 4:30 pm (Eastern Daylight Time)

<https://www1.gotomeeting.com/register/672826648>

Dial: 1-218-936-4141

Access Code: 4502347#

1 Welcome and agenda additions

2 Review of or corrections to April draft minutes

April minutes approved.

3 DOE/HQ Update

Antonio Ruiz

No report.

4 C&S Events and Fuel Cell Safety Information

http://www.fuelcellstandards.com/calendar_new.html

Kelvin Hecht

<http://www.hydrogenandfuelcellsafety.info/meetings.asp>

Karen Hall

<http://www.h2incidents.org/>

Steve Weiner

The Hydrogen Incident Reporting and Lessons Learned Database now has 206 safety event records. A draft of the next posting for the quarterly Lessons Learned Corner has been completed and is under review, covering ventilation in laboratories and other facilities. Linda Fassbender will be providing a presentation on Tuesday afternoon, May 15th at the DOE Hydrogen Program Annual Merit Review and Peer Evaluation Meeting on the PNNL hydrogen safety knowledge tools work. “Lessons Learned from Safety Events,” presented by Linda Fassbender and Steven Weiner at the International Conference on Hydrogen Safety, has been published online by the International Journal of Hydrogen Energy (<http://dx.doi.org/10.1016/j.ijhydene.2012.03.152>).

5 Codes and Standards Organization Updates

IEC TC 105

No report.

ISO TC 197

No report.

NFPA

NFPA 52 just held their ROC meeting at NREL. We should expect an ROC meeting report shortly.

ICC

Bruce Johnson – The Codes development hearings for the Group A cycle are on-going. There are a couple of changes the HIPOC has submitted that are available. A webcast of the hearings are available on

the website. The results from the hearings will be posted on June 8. A public comment period will follow. That will move the Group A proposals forward to the final action period in Portland.

Fire code update –

ICC is providing technical support for the HIPOC meeting. There is some concern for long-term in the level of support of HIPOC.

CSA

Josip Novkovic provided an update on CSA. The presentation can be found online at [http://www.fchea.org/core/import/PDFs/CSA%20Group%20Update%20\(2012-04-26\).pdf](http://www.fchea.org/core/import/PDFs/CSA%20Group%20Update%20(2012-04-26).pdf).

Any questions can be submitted to Josip by email at josip.novkovic@csagroup.org.

UL

No report.

SAE

Meetings in June. Safety Working Group – documents 2578 and 2579.

Others

6 Discussion Topics

Regulatory Matrix Review and Comment

Karen Hall

Karen Hall is going through the feedback from last month's meeting and will help to identify what the key areas are and where the relevancy is for the particular standard/regulation. An update will be provided at the next meeting.

Permitting and Installation of Hydrogen Fueling Stations

Connection Devices and Sensors

Robert Wichert

No report.

CaFCP Station Implementation Team

Jennifer Hamilton

Jennifer Hamilton – The California Energy Commissions has made available Round 1 of the Proposed Award for the Alternative and Renewable Fuel and Vehicle Technology Program, Grant Solicitation PON-11-609, Hydrogen Fuel Infrastructure. One requirement was to do some pre-work on the California Environmental Quality Act. These stations were ahead on the process. We expect another 3 or so awards to be announced in a second round to come. More information can be found online [here](#).

Ca DMS Metrology

Norm Ingram

No report.

Ca DMS Fuel Quality

Ron Nies

Point of contact for Hydrogen Quality at California DMS updated.

SAE TIR J2601 Compliance

Bob Boyd

No report.

Hydrogen Fuel Quality and Measurement

ASTM D03.14

Jackie Birdsall

ASTM will be holding Committee meetings on June 26 – 27 in San Francisco, California.

NIST

Juana Williams & Marc Buttler

NIST Office of Weights and Measures (OWM)

Juana Williams - Development of Commercial Hydrogen Measurement Standards

- (1) U.S. Weights and Measures Standards Development Process
Fuel Quality Regulation

To date the U.S. National Work Group (USNWG) for the Development of Commercial Hydrogen Measurement Standards has received one recommendation for modifying the proposal to add a new hydrogen fuel specification to NIST Handbook 130 (HB 130). The recommendation proposes removing the term “**surface**” (i.e., ~~surface~~ vehicle) from the definition of “hydrogen fuel,” rather than limit the application. Comments on the proposals can be sent to the USNWG Fuel Specifications Subcommittee (FSS) Chair Bob Boyd by email at: boyd.hydrogen@gmail.com or to the NIST Technical Advisor to the FSS, Juana Williams by email at: juana.williams@nist.gov.

Two regional U.S. weights and measure associations will meet in May 2012 to vote on the proposal for a hydrogen fuel quality specification shown below. The regional voting results will provide input on the proposal to the voting body at the July 2012 National Conference on Weights and Measures. The regional meeting locations and contacts for the associations are:

<p>Northeastern Weights and Measures Association May 14-17, 2012 Johnson & Wales Inn 213 Taunton Avenue Seekonk, MA 02771</p> <p>For meeting information: http://newma.us/content/2012-annual-meeting</p> <p>Lou Sakin Laws & Regulations Cmte. Chairperson Towns of Hopkinton/Northbridge, Mass. email: louissakin@aol.com phone: (508) 620-1148 fax: (508) 497-9702</p>	<p>Central Weights and Measures Association May 21-24, 2012 Cedar Rapids, Iowa</p> <p>For meeting information: http://www.cwma.net/content/2012-annual-meeting</p> <p>Shelly Miller Laws & Regulations Cmte. Chair Wisconsin Department of Agriculture and Consumer Protection email: rachelle.miller@wisconsin.gov phone: (608) 224-4938 fax: (608) 224-4939</p>
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The proposal to add a hydrogen fuel specification and related definitions to NIST HB 130 reads:

Proposal 1: Section 2. Standard Fuel Specifications

2.XX. Hydrogen Fuel. – Shall meet the most recent version of SAE J2719, “Hydrogen Fuel Quality for Fuel Cell Vehicles.”

Proposal 2: “Definitions for Hydrogen Fuel for Internal Combustion Engines and Fuel Cell Vehicles,” which reads:

Section 1. Definitions

1.XX. Fuel Cell. – An electrochemical energy conversion device in which fuel and an oxidant react to generate electricity without any consumption, physically or chemically, of its electrodes or electrolyte. (Added 201X)

1.XX. Hydrogen Fuel. – A fuel composed of molecular hydrogen intended for consumption in a **surface** vehicle or electricity production device with an internal combustion engine or fuel cell. (Added 201X)

1.XX. Internal Combustion Engine. – A device used to generate power by converting chemical energy bound in the fuel via spark-ignition or compression ignition combustion into mechanical work to power a vehicle or other device. (Added 201X).

The regional L&R Committees will also consider a separate new proposal to make further modifications to the current NIST HB 130 Method of Sale (MOS) Regulation definition for “hydrogen fuel” to ensure the definitions for that term are aligned in the MOS and fuel specification sections of HB 130.

(2) International Hydrogen Device Standards

R 81 "Dynamic Measuring Devices and Systems for Cryogenic Liquids" (20XX)

A first committee draft (1 CD) of R 81 "Dynamic Measuring Devices and Systems for Cryogenic Liquids" Part 1: Metrological and technical requirements and Part 2: Metrological controls and performance tests is under internal review at NIST. The 1 CD is scheduled for distribution in May 2012 to national stakeholders and OIML Technical Committee 8/Subcommittee 6 for their review and comment. The 1998 version of R 81 was recently reformatted and revised to include: (1) new ISO and IEC Standards as recommended in OIML D 11 (2004), (2) new developments in hydrogen measurements, (3) revise density equations, and (4) any other remaining relevant standards and national documents.

Please contact Juana Williams by email at: juana.williams@nist.gov for additional information.

7 Open Discussion & Other Issues

It was noted the regular date of the June meeting would be Wednesday, June 6th, and that the World Hydrogen Energy Conference was scheduled for that week in Canada. A brief informal poll of those on the call indicated no anticipated conflict, so the June meeting was scheduled for June 6th at 3-4:30 pm Eastern."