

National Institute of Standards and Technology (NIST)
Technology Services
Weights and Measures Division (WMD)
NHFCC&SCC – August 2007 Agenda Item 7

(1) The NIST WMD final draft of its Long Range Plan for the Implementation of Hydrogen in the Marketplace will not be ready for release until mid August 2007.

(2) The 2007 Annual Meeting of the 92nd National Conference on Weights and Measures (NCWM) was held July 8-12, 2007 in Snowbird, Utah. The Director of Technology Services outlined ongoing work on fuel cell and hydrogen technology in various laboratories at NIST as a result of funding from the American Competitiveness Initiative. Additionally, the NCWM was updated on WMD's work to develop standards for commercial hydrogen measurement.

(a) Representatives of the WMD Legal Metrology Devices Group met with the Meter Manufacturers Association¹ (MMA) on July 8, 2007 to brief the group on work to develop U.S. standards for hydrogen measurement. The WMD requested the MMA's input on draft U.S. standards and international recommendations under consideration by the weights and measures community for hydrogen measurement.

(b) The WMD International Legal Metrology Group updated the NCWM membership on July 9, 2007 on related International Organization of Legal Metrology² (OIML) standards for hydrogen measuring devices and systems as follows:

1) The U.S. voted not to accept OIML Project 2 of Technical Committee 8 Subcommittee 7 "Compressed Gaseous Fuel Measuring Systems for Vehicles (2003 edition) for procedural and technical reasons.

2) The WMD plans to develop a U.S. position on the need to update International Recommendation 81 (R 81) "Dynamic Measuring Devices and Systems for Cryogenic Liquids" (a 1998 base document and 2006 test report) based on input from U.S. stakeholders. The U.S. is also Secretariat for Technical Committee 8 Subcommittee 6 (TC8SC6) responsible for R 81, where the nine member countries of TC8SC6 must reach a consensus by September 2007, on whether the document needs an update or can be confirmed for five more years. A report on the U.S. position and TC8SC6 is due to the BML by mid September.

(3) The WMD is making plans for a two-day kickoff meeting October 3-4, 2007 at NIST, Gaithersburg, MD for a U.S. National Work Group to work on developing standards for commercial hydrogen measurement. The group will be asked to review a second draft of the NIST Handbook 44 Hydrogen Gas Meters Code and arrive at the best approach for developing appropriate standards for equipment performance and other

areas of legal requirements (method of sale, etc.) as well as test procedures. Travel information and a meeting agenda will follow, shortly.

(4) The NIST Materials Science and Engineering Laboratory's Materials Reliability Division will hold a workshop on August 21-22, 2007, in Boulder Colorado to identify the research needs for mechanical test procedures needed to assess materials to be used in hydrogen pipelines, stationary storage tanks, and their joints. Online registration is available for the workshop at <http://www.boulder.nist.gov/div853>.

¹ Meter Manufacturers Association (MMA) is a group of U.S. meter and related equipment manufacturers reorganized in 1976 to work to promote a better understanding of metering systems and their use through education, by addressing technology issues, and promoting uniformity in national standards and through harmonization with international legal metrology requirements.

²International Organization of Legal Metrology (OIML) established in 1955 is an intergovernmental treaty organization whose membership develops model regulations for the performance and test of measuring instruments subject to legal controls through an international consensus. For more information visit the OIML web site at <http://www.oiml.org>