



DOE Meteorological Coordinating Council (DMCC)

Highlights DMCC Teleconference 11-05 Tuesday, November 15, 2011, 12:30–1:30 p.m. EST

Participants

Tom Bellinger, Y-12
Kevin Birdwell, ORNL
John Ciolek, AlphaTrac
Kirk Clawson, ARL FRD
Dave Freshwater, NA-41
Cliff Glantz, PNNL

Eric Kabela, SRNL
Carl Mazzola, Shaw Environmental
John Merrick, DOS/SR (Retired)
Walt Schalk, ARLSORD/NNSS
Gus Vazquez, HS-22
Tony Wegrecki, LLNL

Roll Call

Carl Mazzola conducted roll call and acknowledged that 12 individuals involved in EMI SIG DMCC program were present. The fifth and last DMCC teleconference of CY2011 was called to order.

New DMCC Web Page Postings

Carl stated that highlights for teleconference 11-04 are posted on the DMCC portion of the EMI SIG website.

Cliff Glantz discussed the recent meteorological DOE Order posting that was prepared to assist the site meteorologists in understanding the requirements of their programs.

DMCC Assist Visit Program Activity

Carl stated that there are no new assist visits to report.

A brief report on the LLNL meteorological program DMCC consultation with observations and recommendations associated with the 52-meter meteorological tower is under review by Tony Wegrecki, LLNL meteorologist.

While in Oak Ridge in October 2011, Carl met with Kevin Birdwell and Tom Bellinger to discuss a combined DMCC Assist Visit update at Y-12 (after four years) and ORNL (after three years) for late spring of 2012.

Carl will contact Scot Johnson, LANL, to confirm a summer 2012 assist visit update. Walt is in contact with Gina Deola.



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Below is the status of the Assist Visit program (not discussed at this teleconference):

Site	DMCC Assist Visit Status
Brookhaven National Laboratory (BNL)	Joe Terranova is addressing the 17 observations and recommendations from the July 30-31, 2009 AV. BNL management have funded a 0.75-FTE position and budgeted \$240,000 for instrumentation upgrades.
Hanford	Observations and recommendations from the September 25-26, 2008 AV, was used in transition of the meteorological program to contractor, Mission Support Alliance (MSA).
Idaho National Laboratory (INL)	Last follow-up AV was conducted on April 20-21, 2010.
Lawrence Livermore National Laboratory (LLNL)	A consultation performed on September 14, 2011, is under review.
Nevada National Security Site (NNSS)	The last AV was conducted in September 2007.
Pantex	The last AV was conducted in 1997.
Savannah River National Laboratory (SRNL)	Chuck Hunter continues to address the 11 observations and recommendations from the June 2009 AV, which were well received by both DOE and SRNL stakeholders.

DMCC Projects

DOE EH-0173 Revision Support (Activity proceeding)

Gus Vazquez reported no new activity on the effort to revise DOE EH-0173T, *Environmental Regulatory Guide for Radiological Effluent Monitoring and Environmental Surveillance*, into a DOE Standard to align with and support DOE O 458.1, *Radiation Protection of the Public and the Environment*.

A PDF of DO EH-0173T is posted on the new DMCC's DOE Orders and Guides webpage.



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A suggestion remains open to develop a History of DMCC for posting on the website to benefit new DMCC members. POC: TBD.

Walt and Karl will contact Ken Burk and/or Dana Ward to encourage Hanford/MSA participation in future DMCC events.

Related Federal/Private Sector Programs

AI 04-11: Meteorological Monitoring and Meteorological Modeling Voluntary Consensus Standards (VCSs)

DMCC members assist the American Nuclear Society (ANS) as the Standards Development Organization in developing and maintaining eight national voluntary consensus standards (VCS).

A status of each effort follows:

ANSI/ANS-2.3 (Mazzola)	Issued on April 22, 2011; supporting the Natural Phenomena Hazard (NPH) DOE standard (i.e., DOE-STD-1020-2011).	Activity Completed
ANSI/ANS-2.15 (Ciolek)	ANS-24 concurrence review comments are incorporated into latest draft. It has not reached the 60-day NFSC consensus review and ballot.	Activity Proceeding
ANSI/ANS-2.16 (Ciolek/Rishel)	At WG kickoff meeting concurrent with June 2011 NUMUG meeting, a needs assessment for both DOE and NRC was completed. First draft of outline is being prepared. James O'Brien, HS-30 has joined WG.	Activity Proceeding
ANSI/ANS-2.21 (Vigeant)	ANSI/ANS-2.21 NFSC consensus review comments were resolved and it is at ballot. Publication is expected by early-2012.	Activity Proceeding
ANSI/ANS-2.31 (Mazzola/Schalk)	WG is formed with Walt Schalk and Carl Mazzola as members. WG populated with both meteorologists and hydrologists. At kickoff meeting in Cleveland, OH, on October 24, 2011, writing assignments were given by WG Chairman John Stevenson. Carl Mazzola has completed Sections 2-3. First draft is expected by February 2012.	Activity Proceeding
ANSI/ANS-3.8.10 (Ciolek/Rishel)	The ANS-2.15 WG will begin ANS-3.8.10 for emergency response consequence assessment after it sends ANS-2.16 for consensus review. John Merrick volunteered to be on the WG.	Activity Proceeding



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ANSI/ANS-3.11 (Parker)	ANSI/ANS-3.11 is reaffirmed with its five-year sunset at the end of 2015. At the NUMUG meeting, the WG began the revision process and is looking at developing additional criteria to be applied to meteorological networks. Gus Vazquez has interest in participating in the WG.	Activity Proceeding
ANSI/ANS-58.25 (Mazzola)	The standard associated with Level III probabilistic risk assessments that addresses both meteorological data (Section 4.7) and atmospheric transport and diffusion models (Section 4.8) for risk-informed safety evaluations received 520 comments in the RISC consensus review; 69 associated with Sections 4.7 and 4.8. Some members of the WG met in Chicago, IL, in late-October, 2011 and three others in early-November, while at the Winter ANS meeting in Washington, DC, to resolve the comments. A full WG meeting on January 23–25, 2012, in Houston, TX, will address the remaining comments.	Activity Proceeding

NNSA/DOE Site Initiatives

AI 09-01 Forecast Models on GPU Software (Activity proceeding)

Kirk Clawson indicated that the ARLFRD proposal with Boise State University (BSU) to develop a NVIDIA GPU version of HYSPLIT based on Computational Fluid Dynamics is funded and a graduate student from BSU is assisting Rick Eckman in the study. John Ciolek reported that CAPARS at ORNL is being redeveloped for GPU architecture. WRF is also being optimized for GPU usage with Portland Group compilers, which are proven to be a good analysis tool.

Round Robin Discussions

The following updates were shared:

DOE Site	Presenter	Discussion
INL	Kirk Clawson	ARL FRD is involved with two EOC activations: (1) On 11/11/11, a liquid sodium fire with no damage and one person taken to hospital and released; and (2) a couple of weeks ago, a breach of a plutonium container exposed 17 people. Several are still under observation.



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LLNL	Tony Wegrecki	<ul style="list-style-type: none"> • While upgrading the system for meteorological data collection, LLNL recently added a long range Ethernet connection as the primary communications, while keeping the phone dialup as backup. • A backup web server is being set up for use by the local emergency people in the event of a failure in the primary. • A draft on the review of the meteorological systems at LLNL and Site 300 is in progress.
NA	John Merrick	John continues to work with the DMCC for the present time (despite earlier report that he would be away with potential work with an Air Force project).
NNSS	Walt Schalk	<ul style="list-style-type: none"> • ARL SORD is nearing the end of “right-sizing” of the meteorological tower network, and is anticipating the arrival of a new SODAR from Scientech in December 2011. • Walt’s team obtained components of a wind profiler used by SNL on a project in Alaska, and is exploring that opportunity. • Recently provided weather data and forecast information for a site experiment. A launched balloon collected data up to an altitude of 110,000 feet, just under 7 mb, using the mobile GPS radiosonde system. <p>NNSS supported the EOC exercises and drills.</p>
ORNL	Kevin Birdwell	<ul style="list-style-type: none"> • ORNL is updating its primary and backup meteorological data collection systems. • As a result of the cybersecurity event that occurred at Oak Ridge in April 2011, Air Vision is now being used. • Problems have emerged with the REMTECH PA-2 SODAR. • ORNL is increasing the amount of research in the program. • Defense Nuclear Facilities Safety Board (DNFSB) is inquiring about the MACCS2 code.
SRNL	Erik Kabela	<ul style="list-style-type: none"> • SRNL is addressing DNFSB questions about the MACCS2 code. • A new meteorologist, a PhD from Iowa State, is working with atmospheric dispersion modeling. He will focus on incorporating the WRF model into the dispersion modeling scheme like the RAMS model is currently doing.



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DOE Site	Presenter	Discussion
Y-12	Tom Bellinger	<ul style="list-style-type: none">• Y-12 is addressing DNFSB questions about the MACCS2 code.• A local TV station is featuring Tom in its 11/15/11 segment on "other" meteorologists.

New Business and New Issues

NUMUG Question: Dew Point Temperature: The DMCC received a question regarding dew point temperature measurements taken at elevated levels. Walt will send out the information request to the DMCC membership for response.

DMCC Teleconference Structure: The 2012 DMCC Teleconference schedule was announced for discussion. The following dates are approved: 1/17/12, 3/13/12, 7/1/12, 9/20/12, and 11/13/12.

Walt Schalk continues to work on modifying the content and structure of the DMCC teleconferences to put more emphasis on the Round Robin interaction and new business/issues segments. The following structure was suggested and agreed upon. Walt will send out a call for information and updates about two weeks prior to the teleconference on the following DMCC subject areas: (1) webpage updates; (2) Assist Visit activity; (3) Consensus Standards activity, and, (4) longer-term DMCC activities such as the DOE-EH/0173T revision support and weather modeling using GPUs. The agenda deadline will be about five days later. About a week prior to the teleconference, the call agenda and a DMCC "Newsletter" containing the updates, will be distributed to the membership. Feedback from the participating members was positive. The timeline for the next conference call is as follows:

- January 3, 2012: Walt sends out the call for updates
- January 8, 2012: Update information due
- January 11, 2012: Agenda and "newsletter" sent to membership
- January 17, 2012: Conduct teleconference

26th EMI SIG Meeting/20th DMCC Meeting: Walt announced that the next EMI SIG Annual Meeting, in which a DMCC meeting will occur, is scheduled at the Renaissance Hotel, Seattle, WA, on May 14–17, 2012. The 20th DMCC Meeting will be held from approximately 7:30 a.m.–10:30 a.m. on May 14, 2012. Final timing will be established during the meeting planning phase.



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Walt and Erik Kabela will devise a new format for the annual DMCC Meeting to focus much less time on commonly discussed DMCC business matters and more time on technical presentations; especially from professionals who are located near the meeting venue.

Since the next DMCC Meeting is in Seattle, NOAA Hazmat will be invited. Mark Miller (NOAA NOS, Seattle) who manages the Areal Locations of Hazardous Atmospheres (ALOHA) chemical consequence code, has already agreed to participate. Further discussion about meeting participants generated several other ideas. In addition to the local National Weather Service office in Seattle, other suggested participants include the local American Meteorological Society chapter, and representatives from the University of Washington Atmospheric Sciences program. One suggestion was Cliff Maas to talk about the Northwest Regional Modeling Consortium. Another suggestion was for a representative from PNNL's Global Change group. John Merrick also suggested a meeting segment to include Lessons Learned on such topics as exercises and drills, and equipment. Walt, Erik and Carl will develop the DMCC agenda for the May 2012 meeting.

The full-day HOTSPOT 2.07.2 Workshop and Computer Practicum will be offered again on Thursday, May 17, 2012.

Next DMCC Teleconference

The next DMCC teleconference is scheduled for **Tuesday, January 17, 2012, at 12:30 p.m. EST.** All CY2012 DMCC conference calls are scheduled to be conducted on the third Tuesday of every odd month, with the exception of May, unless circumstances dictate otherwise.

Adjournment

The meeting adjourned at **1:32 p.m. EST.** Carl and Walt thanked everyone for their time and contributions.

DMCC Program Activities Status

Based on the information exchange from the DMCC Meeting and this teleconference, no new activities were opened and none were closed. The number of DMCC activities remains at three.

The color-coding system used in the teleconference highlights is as follows:

- **Existing AIs that are not closed are colored green.**
- **New AIs are colored yellow.**
- **AIs to be closed are colored blue.**



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Carl Mazzola will update the DMCC activities list based on the information exchange from this conference call.

Respectfully Submitted,

Carl Mazzola