



**Highlights**  
**DMCC Teleconference 12-04**  
**Tuesday, September 18, 2012, 12:30–1:30 p.m. EDT**

**Participants**

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Fernando Aluzzi, LLNL NARAC  
Tom Bellinger, Y-12  
Kevin Birdwell, ORNL  
John Ciolek, AlphaTRAC  
Dorothy Cohen, ORISE

Erik Kabela, ORNL  
Mark Miller, NOAA Hazmat  
Walt Schalk, ARLSORD/NNSS  
Gus Vazquez, DOE/HS-22  
Tony Wegrecki, LLNL

**Roll Call and Welcome**

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Walt Schalk conducted a roll call and acknowledged that 10 individuals from five DOE/NSA sites involved in the EMI SIG DMCC program were present, and the fourth DMCC teleconference of 2012 was called to order at 12:34 p.m. EDT.

**DMCC Pre-Call Update**

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Carl Mazzola and Walt prepared a pre-call update that was sent out on September 12, 2012, and shown in Attachment I. The DMCC pre-call update covered the following topics: (1) Assist Visit activities; (2) Voluntary Consensus Standards activities; (3) DMCC web page update; and, (4) Forecast models and GPUs.

**Assist Visit Activities**

Walt briefly discussed the Assist Visits to Y-12 and Oak Ridge National Laboratory (ORNL) during the week of August 6, 2012, as being very successful and also discussed the meeting with NOAA Atmospheric Transport and Diffusion Division (ATDD) and Erik Kabela, ORNL. Walt and Erik had great conversation with Will Pendergrass and a tour of the facility by Dr. Tilden Meyers, ATDD Deputy Director. Possible collaborations between ATDD and ORNL, especially on WRF model activities, were discussed as well as the Y-12 interest in the ATDD mesonet in the Oak Ridge area.

Each site was given an opportunity to provide feedback on the assist visits. Tom Bellinger, Y-12, was very happy with the visit and commented that many of his observations from the previous visit had been resolved. Kevin was also well pleased with the results of the visit as he too saw many of his observations resolved. Erik talked about one recommendation regarding the creation of a meteorology group in his area. He said that initial discussions have already started and most of the stakeholders are working and talking to determine if this is feasible.



## **Voluntary Consensus Standards Activities**

John Ciolek gave a brief update. He commented that the standards he discussed at the annual Modeling Conference at George Mason University were well received and that he received several new working group member requests. In addition to the ones listed in the pre-call notes, Ron Baskett, NARAC was also interested in joining the ANS-2.16 WG.

John also wanted to change the status of ANS-2.15 to ACTIVITY ONGOING since there was one negative ballot from Nuclear Facilities Standards Committee that needed resolution.

Tom Bellinger also briefly mentioned the ANSI/ANS-3.11 kickoff meeting was held in Oak Ridge, TN on August 7, 2012, and that there will be much work to do and WG members are still being recruited. Tom told of the first full WG meeting on October 17, 2012, just prior to the Nuclear Utility Meteorological data User Group (NUMUG) meeting in McLean, VA.

John Ciolek also reminded everyone that there are WG meetings on several standards that will be taking place around the time of the NUMUG meeting.

## **DMCC Web Page Update**

Walt mentioned that there were no new additions to the DMCC web page since the last teleconference except that the March 2012 DMCC teleconference highlights and the 2012 DMCC Meeting Report were posted.

## **Forecast Models and GPUs**

There was no activity to report on forecast models and Graphical Processing Unit (GPU) applications.

## **Old Business**

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### ***DOE EH-0173 Revision Support (Activity Continuing)***

Gus Vazquez provided an update on recent activities regarding DOE-EH-0173T. He pointed out the current document was published in 1991. As a result of DOE O 458.1 being issued last year, DOE/HS-22 decided to conduct a preliminary review of DOE-EH-0173T by HS Subject Matter experts. Gus indicated that the group decided to request a review by the DMCC on the meteorology-related chapter and appendices and will send a DMCC Review request to Walt by the end of September and request Jim Fairbent approval prior to distribution.



***EMI SIG Training Product Review (Activity Continuing)***

Walt mentioned that he had contacted the EMI SIG Training Committee Chair to inquire if a DMCC review and comment of their Lessons Learned project document was still desired. The Training Committee stated that it is still interested in a DMCC review. Accordingly, Walt sent out a request for a review and comment to the DMCC community and included the web link to the document. Walt will assemble comments by October 15, 2012 and forward to the Training Committee.

***Issues with Wind Speed Data and MACCS2 X/Q (Activity Continuing)***

Earlier in the year, Walt was contacted by Chip Lagdon, DOE/HSS, to coordinate a response to a technical issue found by a MACCS2 user. The issue involves the resolution of the wind speed data used in MACCS2 and the appropriate determination of 95% X/Q values. Cliff Glantz and Carl drafted a White Paper on this issue and will provide the draft for DMCC and SCAPA Consequence Assessment Modeling Working Group (CAMWG) peer review. Walt gave an update on the status of the White Paper regarding this issue. Walt and Cliff had a call to discuss some of the issues presented. Cliff has arranged a conference call with Jorge Schulz, the issue originator, for next week to discuss specifics about the scenarios modeled and how the input data were used.

***MADIS Data Quality Assurance Standard (Activity Continuing)***

John mentioned that CAPARS at ORNL uses readily-available MADIS data. This large database has various levels of quality assurance, some of which may not be sufficient to ensure that the consequence modeling results can be trusted. In addition, some of the instrumentation may not be properly sited. John stated that there is a need to develop a standard to screen the data. No additional discussion at this teleconference.

***SODAR Survey (Activity Continuing)***

Per the request of Jean Dewart who needs to replace the now defunct LANL SODAR, Walt sent out a survey of SODAR equipment that is being used at the DOE and NNSA sites. Contributions to the survey were due March 31, 2012. Walt will compile the information and send it out as a DMCC product. No additional discussion at this teleconference.

***ALOHA-HYSPLIT (Activity Continuing)***

Mark Miller presented the new Hybrid HYSPLIT model developed by NOAA NOS Seattle, WA, NOAA ARL HQ, Silver Spring, MD, and NOAA ARL FRD, Idaho Falls, ID. Mark described the new model setup as an integration of the ALOHA model into the HYSPLIT model. Where the ALOHA component is acting as a front end chemical source term development engine using all the tools that ALOHA has designed and integrated and a back end concentration or protective action



criteria database. Associated with this is documentation that describes chemical source terms, protective action criteria, and basic model concepts. Mark then stepped through a modeling event using the NOS facility in Seattle as the location, gridded NWS forecast model output for meteorology, and acrolein as the chemical. The model ran very quick and produced a plume/concentration plot on a Google Map background that included a summary of the input parameters. One issue Mark did mention was the method of concentration averaging used in HYSPLIT. Currently, HYSPLIT averages it's concentrations over the lower 100m of the model grid. The reason this is done is to remove some of the spottiness of the contours that can be produced. However, emergency responders are primarily interested in the concentrations at near normal human breathing height (about 1.5 meters). This was discussed with the ARL HQ modeler and it was agreed to be looked into.

## **New Business**

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### ***Experiments at Dugway Proving Grounds (Activity Continuing)***

John Ciolek was going to give a small presentation on Live Meeting about the information that John Pace, Meteorology Director at Dugway Proving Grounds, had provided. He was also going to speak about some experiments being conducted in this recently-developed meteorology test bed. However, due to technical difficulties this did not occur. This topic will be held over to the next DMCC teleconference in November. John will also provide the presentation for distribution prior to the meeting, which can possibly be included with the pre-call notes.

### ***October 17-19, 2012 NUMUG Meeting***

Walt provided logistical information regarding the upcoming NUMUG meeting. John Ciolek reminded all that there was going to be a number of Standard WG meetings before and during the meeting which is being held in McLean, VA.

### ***EMI SIG DMCC Meeting 2013***

Walt provided an update on the 2013 EMI SIG Meeting from Jim Fairobent. At this time there has not been a decision regarding whether the 2013 meeting will be approved. Jim is still waiting to hear back from the Secretary of Energy's office regarding the conference.

### ***IMAAC Operations Center Change***

Mark Miller asked if any DMCC call participants had heard of the recent change regarding the IMAAC. He mentioned that a memo had gone out to the IMAAC community that technical operations are being moved from NARAC at LLNL to the Defense Threat Reduction Agency (DTRA) effective October 1, 2012. Mark said he would forward the memo to Walt so he could



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distribute it to the DMCC community. Fernando Aluzzi from NARAC said they were recently about the move and that things were moving quickly to accomplish this action.

### **Round Robin**

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Due to time constraints, a round robin was not conducted.

### **Next DMCC Teleconference**

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The next DMCC teleconference is scheduled for **Tuesday, November 20, 2012**, at **12:30 p.m. EST**. All 2012 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**

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The meeting adjourned at **1:40 p.m. EDT**. Walt thanked everyone for their time and contributions.

Respectfully Submitted,

*Carl Mazzola*



## ATTACHMENT I

### ***Assist Visit Program 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 in FY11 for instrumentation upgrades. **Discuss follow-up AV at EMI SIG Meeting.**

Hanford: Paul Fransioli used the 28 observations and recommendations from the September 25-26, 2008 AV in planning the transition of the meteorological program from PNNL to Hanford's Mission Support Alliance (MSA). **Ken Burk was sent an e-mail to see if there was an interest in a follow-up AV. No response as of yet.**

Idaho National Laboratory (INL): Kirk Clawson is addressing the nine new observations and recommendations from the follow-up AV that was conducted on April 20-21, 2010. **Kirk Clawson is drafting a letter to the DMCC indicating progress.**

Lawrence Livermore National Laboratory (LLNL): A consultation was performed on September 14, 2011 and is under review. **Tony Wegrecki is broadening the scope with a self-assessment of other program areas that were not covered.**

Los Alamos National Laboratory (LANL): Scot Johnson postponed his request to have a follow-up AV in the summer 2010 by two years until summer 2012, which will be six years since the initial AV in August 2006. **Scot has taken a 1-year sabbatical for CY12. Future AV possibility in FY13 to be discussed with Jean Dewart.**

Nevada National Security Site (NNSS): The last AV was conducted in September 2007. **Walt Schalk indicated FY13 may be a good year for a follow-up AV.**

Oak Ridge National Laboratory (ORNL): **A follow-up AV was conducted the week of August 6-9, 2012, coupled with a Y-12 AV update. The draft Assist Visit report is being developed and is anticipated to be distributed by the end of month for initial comment by the team and the ORNL meteorologists, Kevin Birdwell and Erik Kabela.**

Pantex: The last AV was conducted in 1997. **No point of contact to discuss a follow-up AV.**

Sandia National Laboratory (SNL): The last AV was in 2003. DMCC will attempt to combine SNL with LANL in 2012 if SNL agrees to a follow-up AV. **Gina Deola was sent an e-mail to see if there was an interest in a follow-up AV. No response as of yet.**



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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.

Waste Isolation Pilot Plant (WIPP): The last AV was in August 2005. **Dan Watterson was sent an e-mail to determine if there was an interest in a follow-up AV. No response as of yet.**

Y-12: **A follow-up AV was conducted the week of August 6-9, 2012, coupled with an ORNL AV update. The draft Assist Visit report is being developed and is anticipated to be distributed by the end of the month for initial comment by the team and the Y-12 meteorologist, Tom Bellinger.**

### **ANSI/ANS VCS Status**

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**

ANS-2.15 (Ciolek): The NFSC closed balloting on the ANS 2.15 Standard on March 7, 2012 after receiving 85% response, including: nine approved, six approved with comments, three not approved, four abstained, four no response. The Working Group has 90 days to resolve the comments. Concurrently, the standard is open to public comment that will end before April, 1, 2012. APPENDIX A will be reconfigured into a technical paper. **Standard approved by NFSC and SB and is being approved by ANSI BSR. Publication expected before the end of 2012. ACTIVITY COMPLETED.**

ANS-2.16 (Ciolek/Rishel): WG kickoff meeting concurrent with June 2011 NUMUG meeting. Needs assessment for both DOE and NRC was completed. First draft of outline is being prepared. James O'Brien, HS-30 has joined the WG. **Presentation at July 2012 George Mason University Modeling Conference on standards process, key points of the standard and future WG direction. Several new volunteers added to WG including Steve Hanna, Joe Chang (DHS), Bruce Egan, And Jay Boris (Naval Research Laboratory). Full WG Meeting at NUMUG meeting in October, 2012. ACTIVITY PROCEEDING**

ANS-2.21 (Vigeant): **Standard approved by ANSI. Publication is expected later in 2012. ACTIVITY COMPLETED**

ANS-2.31 (Mazzola/Schalk): WG has been populated with meteorologists and hydrologists and Walt Schalk and Carl Mazzola are members. Kick-off meeting held in Cleveland, OH, on October 24, 2011 and writing assignments given out by WG Chairman John Stevenson. Carl



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Mazzola has completed Sections 2-3. First draft is expected by April 2012. **First draft has been developed. The next WG meeting is planned for week of December 3, 2012 in Las Vegas, NV at DOE/NV support facility. ACTIVITY PROCEEDING**

ANS-3.8.10 (Ciolek/Rishel): The ANS-2.15 working group 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 working group. **No activity.**

ANSI/ANS-3.11 (Bellinger/Call): **Tom Bellinger (Y-12) and Jennifer Call (TVA) are new WG co-chairs. Planning meeting for revision of standard was held in Oak Ridge, TN on August 7, 2012. WG is being repopulated with writers and reviewers. First WG meeting scheduled for October 17, 2012, just prior to NUMUG meeting in McLean, VA. ACTIVITY PROCEEDING**

ANS-58.25 (Mazzola): The standard associated with Level III probabilistic risk assessments that address 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 was held on January 24-26, 2012 in Atlanta, GA to resolve the comments. **The WG met in Chicago on July 11-12, 2012 to address CNRM comments. ACTIVITY PROCEEDING**

### **Forecast Models and GPUs Status**

No updates were reported.

### **DMCC Web Page Status**

No updates were reported.