



**Highlights**  
**DMCC Teleconference 12-02**  
**Tuesday, March 20, 2012, 12:30–1:30 p.m. EDT**

**Participants**

---

Jack Badlinger, SPRO  
Tom Bellinger, Y-12  
John Ciolek, AlphaTRAC  
Dorothy Cohen, ORISE  
Gina Deola, SNL  
Jean Dewart, LANL  
Dave Freshwater, NA-41  
Cliff Glantz, PNNL  
Chuck Hunter, SRNL

Eric Kabela, SRNL  
Carl Mazzola, Shaw Environmental  
Margaret McCalla, OFCM  
John Merrick, Retired  
Walt Schalk, ARLSORD/NNSS  
Joe Terranova, BNL  
Steve Vigeant, Shaw Environmental  
Tony Wegrecki, LLNL

**Roll Call and Welcome**

---

Carl Mazzola conducted a roll call and acknowledged that 17 individuals from 10 DOE/NNNSA sites involved in the EMI SIG DMCC program were present, and the second DMCC teleconference of 2012 was called to order by Walt Schalk.

Two new DMCC members participated on the call:

- (1) Jean Dewart, LANL, who is responsible for the meteorological program at LANL during the one-year sabbatical taken by Scot Johnson
- (2) Jack Badinger of the Strategic Petroleum Reserve Organization (SPRO)

**DMCC Pre-Call Update**

---

Carl and Walt prepared a pre-call update that was sent out on March 14, 2012, and which is shown in Attachment I. The pre-call update covered the topics of: (1) Assist Visit activities; (2) Voluntary Consensus Standards activities; (3) DMCC web page update; and, (4) Forecast models and GPUs. This new approach, which was implemented this year, saves time on repetitive items for discussion of other matters of interest to DMCC members.

John Ciolek spoke to the ANS-2.15 standard on dispersion modeling of routine releases indicating that out of 27 consensus reviewers, only three voted no. The working group is presently addressing the comments, none of which appear to be too difficult. Carl will ensure



that the rebalot will be shortened to 30 days. This standard will likely be approved by the American National Standards Institute (ANSI) in 2012.

Steve Vigeant also briefly spoke on the ANS-2.21 standard on ultimate heat sink, which is in the final stages of rebalot. This standard will also likely be issued in 2012.

Carl mentioned that an Update to Assist Visits has been formally requested by Y-12 and ORNL, and due to the proximity of the sites, both will be combined. Y-12 had its last assist visit in 2008, and ORNL had its last assist visit in 2009. These have been scheduled the week of August 6, 2012.

## Old Business

---

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

At prior teleconferences, Gus Vazquez provided a status on the update of DOE EH-0173T, "Environmental Regulatory Guide for Radiological Effluent Monitoring and Environmental Surveillance." DOE EH-0173T is currently being revised into a DOE Standard to align with, and support DOE O 458.1, *Radiation Protection of the Public and the Environment* (issued in February 2011). Training through a webinar on DOE O 458.1 is being planned. Although Gus was unable to participate in this teleconference, he indicated by email that DOE/HS-22 was meeting on Friday, March 23, 2012 to review the table of contents and then to determine a path forward on the revision. After that is determined, Gus will be asking the DMCC to review the draft document.

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

During the last teleconference, Walt discussed the January 4, 2012 email, "Help Wanted: EMI SIG Training Subcommittee Product Review." The EMI SIG Training Subcommittee had published, "Lessons Learned/Best Practices into Emergency Management Training" in 2009 and is seeking volunteers from a cross-section of the EMI SIG subcommittees and working groups to support the update of this training product. Walt had requested that the DMCC members review the document and provide comments, which he will collect and submit to the EMI SIG Training Subcommittee. No comments have been provided yet. Walt extended the comment period to April 15, 2012.

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

During the last teleconference, Walt indicated that he 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 is drafting a White Paper on this issue and will provide the draft for



DMCC review in one or two weeks, with a goal of finalizing it at the May 2012 meeting. Members of the SCAPA Consequence Assessment Modeling Working Group (CAMWG) will also participate in this peer review.

## **New Business**

---

### ***DMCC Annual Meeting Planning (Activity Continuing)***

Walt discussed the planning for the 19<sup>th</sup> DMCC Meeting which will be held from 7:30 a.m.– 12:00 p.m. on Monday, May 14, 2012 in Seattle, WA. The draft agenda was finalized soon after this teleconference and is coordinated with the agendas of the Subcommittee for Consequence Assessment and Protective Actions (SCAPA) and Hazard Assessment Subcommittee (HASC). A Joint Session with SCAPA and HASC is again included this year at the conclusion to the DMCC conference. Final planning will continue until the meeting. John Merrick will request NA-41 approval on his interest in again moderating the DMCC Meeting, as he has for the past three years.

### ***SODAR Survey (New Activity)***

Per the request of Jean, who needs to replace the LANL SODAR, Walt sent out a survey of SODAR equipment that is being used at the DOE and NNSA sites. Contributions to the survey are due March 31, 2012. Walt will compile the information and send it out as a DMCC product.

### ***OFCM FY13 Plan (Activity Complete)***

Margaret McCalla mentioned that the OFCM FY13 Federal Plan, to which DOE contributed, has been posted on the OFCM website. DOE has been providing input on its operational and research activities to OFCM since the late-1990s.

### ***PNL-20734 Sigma Theta Report (New Activity)***

Carl informed everyone of the availability of a new report, PNL-20734, that is associated with sigma theta measurements at Savannah River Site (SRS) and asked Cliff to post it on the DMCC website.

Gina Deola mentioned that she has developed a draft White Paper on the sigma theta stability typing scheme and will send it to Walt for distribution.

Chuck Hunter stated that two additional reports are being prepared on dispersion modeling issues: (1) more detailed version of PNL-20714; and (2) deposition velocity. He will provide these once they are completed.



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

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 developing a standard to screen the data is needed.

**Round Robin**

---

The following updates were shared:

DOE Site	Presenter	Discussion
<b>BNL</b>	Joe Terranova	New 10-meter tower with redundant instrumentation has been installed.  Scott Smith is committed to 0.75 FTE to run the meteorological program and this has improved the program performance. The 90-meter tower needs upgrades including guy wire replacement and this is budgeted for FY13.
<b>Hanford and PNNL</b>	Cliff Glantz	Ken Burk, who manages the Hanford meteorological program, is at an all-day meeting and was not able to participate in this teleconference.  PNNL has a large Atmospheric Sciences and Global Change (ASGC) Division, and some of their emergency preparedness and response products will be displayed at the PNNL booth in the TRADEing Post at the EMI SIG Annual Meeting. Among the tools that will be featured at the booth are the MetView meteorological display software, APGEMS and DUSTRAN/SPRAYTRAN consequence assessment models, and the on-line Chemical Mixture Methodology Wizard.
<b>INL</b>	None	No report



## DOE Meteorological Coordinating Council (DMCC)

DOE Site	Presenter	Discussion
<b>LANL</b>	Jean Dewart	<p>Requested SODAR survey to assist in purchasing new SODAR system to replace old one which cannot be repaired.</p> <p>Due to liability considerations, the wind sensor on Parajito Mountain can no longer have its data transmitted to the LANL consequence assessment system. Working with Verizon to resolve.</p> <p>Budget for FY12 is very tight due to overall reduction in LANL budget, which has led to voluntary and involuntary separations.</p> <p>Working with Gina Deola to provide back-up support relative to wildfires.</p> <p>New CAPARS system is functional in the LANL Emergency Operations Center.</p>
<b>LLNL</b>	Tony Wegrecki	<p>Installing Uninterruptible Power Systems at the LLNL and Site 300 meteorological towers.</p> <p>Evaluating back-up power at two meteorological monitoring stations and asked if any DMCC members have experience with this.</p> <p>Has not yet completed self-assessment due to other workload and will resume it next month.</p>



## DOE Meteorological Coordinating Council (DMCC)

DOE Site	Presenter	Discussion
<b>NNSS</b>	Walt Schalk	<p>The Sciencetech SODAR was received in December 2011, and a computer to drive it is being obtained. Dealing with siting issues with proximity to existing buildings and power and network connectivity requirements.</p> <p>Supporting LLNL-SRNL modeling study by supplying ground truth data and providing input to a White Paper on plume trajectory modeling. Using both RAMS and WRF forecast data for trajectory calculations.</p> <p>In the midst of a major overhaul of the MEDA stations, which is no longer being supported by the vendor.</p> <p>Climbing towers have been eliminated from the mesonet system to remove the need for certified climbers.</p>
<b>OFCM</b>	Margaret McCalla	The OFCM FY13 Federal Plan has been issued.
<b>ORNL</b>	Erik Kabela	<p>After being down four months, the Remtech SODAR has been repaired and is again providing data.</p> <p>CAPARS Version 8 has arrived in the ORNL EOC and is being tested.</p> <p>There are plans to purchase a WRF/RAMS cluster.</p> <p>Management continues to provide funding for working off assist visit recommendations with periodic reporting of status.</p> <p>Working with NOAA ATDD to keep its instruments on the important Chestnut Ridge meteorological tower, which is needed for consequence assessment.</p>
<b>Pantex</b>	None	No report
<b>SNL</b>	Gina Deola	Developed draft sigma theta White Paper in response to a stability class issue. Requested DMCC review before submission to SNL MACCS2 modelers.
<b>SPRO</b>	Jim Badinger	No report



## DOE Meteorological Coordinating Council (DMCC)

DOE Site	Presenter	Discussion
<b>SRNL</b>	Chuck Hunter	<p>John Irwin, retired Environmental Protection Agency, is under contract to assist in the resolution of the MACCS2 SRS modeling issue.</p> <p>Performing an upgrade of the meteorological monitoring system wind speed, wind direction instrumentation, swapping out older bivanes with sonic anemometers.</p> <p>The old ESC data loggers are being replaced by more modern data recording devices.</p>
<b>WIPP</b>	None	No report
<b>Y-12</b>	Tom Bellinger	No major issues to report.

### **Next DMCC Teleconference**

---

The DMCC will next meet at the EMI SIG Annual Meeting in Seattle on May 14 (starting at 7:30 a.m. PDT (10:30 a.m. EDT). A teleconference and webinar link will be provided to support those unable to travel to the meeting.

The next DMCC teleconference is scheduled for **Tuesday, July 17, 2012, at 12:30 p.m. EDT.** 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**

---

The meeting adjourned at **1:30 p.m. EDT.** Carl and Walt thanked everyone for their time and contributions.

Respectfully Submitted,

*Carl Mazzola*



## ATTACHMENT I

### Assist Visit Program

---

Brookhaven National Laboratory (BNL): Joe Terranova is addressing the 17 observations and recommendations from the July 30-31, 2009 AV. BNL management has funded a 0.75-FTE position and budgeted \$240,000 in FY11 for instrumentation upgrades. **Discuss follow-up AV at EMI SIG Annual 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 email 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.

Lawrence Livermore National Laboratory (LLNL): A consultation was performed on September 14, 2011 and is under review. **Tony Wegrecki will broaden the scope with a self-assessment of some 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 one-year sabbatical for CY12. Summer 2012 AV possibility being discussed with Jean Dewart.**

Nevada National Security Site (NNSS): The last AV was conducted in September 2007. **Walt Schalk will decide whether a follow-up AV is needed.**

Oak Ridge National Laboratory (ORNL): Kevin Birdwell continues to address the 23 observations and recommendations from the March 24-25, 2009 AV. **An AV has been requested the week of August 6-10, 2012, coupled with a Y-12 AV update.**

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 sent an email to see if there was an interest in a follow-up AV. No response as of yet.**



## DOE Meteorological Coordinating Council (DMCC)

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 sent an email to determine if there was an interest in a follow-up AV. No response as of yet.**

Y-12: Tom Bellinger continues to address the 24 observations and recommendations from the May 24-25, 2008 AV. **An AV has been requested the week of August 6-10, 2012, coupled with the ORNL AV update.**

### **ANS/ANSI VCS**

---

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): ANS-24 concurrence review provided valuable comments which have been incorporated into latest draft. It is presently undergoing a 60-day NFSC consensus review and ballot. Only one reviewer so far has comments, but there are many. **ACTIVITY PROCEEDING**

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. **ACTIVITY PROCEEDING**

ANS-2.21 (Vigeant): All NFSC consensus review negative comments have been resolved, and it is at rebalot. Publication is expected by summer 2012. **ACTIVITY PROCEEDING**

ANS-2.31 (Mazzola/Schalk): WG has been formed and Walt Schalk and Carl Mazzola are members. WG populated with both meteorologists and hydrologists. Kick-off meeting was held in Cleveland, OH, on October 24, 2011 and writing assignments given out by WG Chairman John Stevenson. Carl Mazzola has completed Sections 2-3. First draft is expected by April 2012. **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. **ACTIVITY PROCEEDING**

ANSI/ANS-3.11 (Parker): ANSI/ANS-3.11 has been reaffirmed and will not reach its five-year sunset until the end of 2015. Matt Parker held a meeting of this WG to begin the revision process at the NUMUG meeting and the WG is looking at developing additional criteria to be



applied to meteorological networks. Gus Vazquez has interest in participating in the WG.

### 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. **ACTIVITY PROCEEDING**

### Forecast Models and GPUs

---

No new information.

### DMCC Web Page

---

A couple of changes were made as a result of discussion during our last call, where Dave Freshwater suggested providing URL links on our DOE Order and Guide webpage rather than the document itself. This removes some of the burden on us to maintain the latest version. So, the following was updated:

- Instead of hosting the pdf file of DOE O 458.1, let's have users download it from the DOE directives webpage at: <https://www.directives.doe.gov/directives/archive-directives/458.1-BOrder/view>. In implementing this change, we will need to assign this new URL to the **DOE O 458.1, "Radiation Protection of the Public and the Environment"** link that is presented in the text.
- Instead of hosting the pdf file to DOE O 5400.5, let's have users download it from the DOE directives webpage at: [https://www.directives.doe.gov/directives/archive-directives/5400.05-BOrder-c2/view?searchterm=5400.5\\*](https://www.directives.doe.gov/directives/archive-directives/5400.05-BOrder-c2/view?searchterm=5400.5*). In implementing this change, we will need to assign this new URL to the **DOE O 5400.5, "Radiation Protection of the Public and the Environment"** link that is presented in the text.

A couple of minor fixes were also completed:

1. Can we please change the way links are activated on our DMCC **Technical Links** webpage (<http://orise.orau.gov/emi/dmcc/technical.htm>) so that when a link is clicked, it is opened in a **new** browser window (rather than replacing our connection to the DMCC website)? The opening of a new browser window to display external-to-EMISIG webpages is standard practice on all of the other DMCC and SCAPA webpages.



## DOE Meteorological Coordinating Council (DMCC)

2. On the **DMCC Publications** webpage (<http://orise.orau.gov/emi/dmcc/publications.htm>), the first link is broken: [Draft NRC Regulatory Guide 1247, Design-Basis Hurricane and Hurricane Missiles for Nuclear Power Plants](#). The new, valid URL for this document is [pbadupws.nrc.gov/docs/ML1004/ML100480890.pdf](http://pbadupws.nrc.gov/docs/ML1004/ML100480890.pdf).

Three pdf links were added:

1. [Evaluating the Wind Data from the Automated Surface Observing System in Oak Ridge, TN - Is KOQT the Calmest Site in the U.S.?](#) by Thomas Bellinger, Y-12, Oak Ridge, TN
2. [DOE O 458.1, "Radiation Protection of the Public and the Environment," issued Feb 2011.](#)
3. [Crosswalk Report: DOE O 5400.5 and DOE O 458.1](#) published in Nov 2011.

The Hanford write-up and URL link on the DOE Site Weather Links webpage were updated:

The [Hanford Meteorological Monitoring Program](#) provides meteorological monitoring and weather forecasts for the Hanford Site. The website features links to real-time meteorological and climatological data (the program's publicly accessible website weather does not report Hanford weather forecasts). In 2011, the meteorological program transitioned from Pacific Northwest National Laboratory (PNNL) to Hanford's Mission Support Alliance. PNNL's [Atmospheric Science & Global Change Division](#) continues to perform a wide range of basic and applied research in the atmospheric sciences. The new link to the Hanford met program is: <http://www.hanford.gov/page.cfm/HMS>.