



Highlights
DMCC Teleconference 12-03
Tuesday, July 31, 2012, 12:30–1:30 p.m. EDT

Participants

Tom Bellinger, Y-12
John Ciolek, AlphaTRAC
Kirk Clawson, ARLFRD
Dorothy Cohen, ORISE
Jean Dewart, LANL
Cliff Glantz, PNNL
Chuck Hunter, SRNL

Carl Mazzola, Shaw Environmental
John Merrick, Retired
Mark Miller, NOAA Hazmat
Walt Schalk, ARLSORD/NNSS
Steve Vigeant, Shaw Environmental
Tony Wegrecki, LLNL

Roll Call and Welcome

Carl Mazzola conducted a roll call and acknowledged that 13 individuals from seven DOE/NNSA sites involved in the EMI SIG DMCC program were present, and the third DMCC teleconference of 2012 was called to order by Walt Schalk.

DMCC Pre-Call Update

Carl and Walt prepared a pre-call update that was sent out on July 25, 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

Carl mentioned that an update to earlier Assist Visits has been formally requested by both Y-12 and ORNL, and due to the proximity of the sites, both will be combined. Y-12 had its last assist visit in May 2008 and ORNL had its last assist visit in June 2009. These have been scheduled the week of August 6, 2012 and will be conducted by Carl Mazzola, Walt Schalk, and Steve Vigeant. All planning and preparations are complete.

Voluntary Consensus Standards Activities

John Ciolek spoke to the ANS-2.15 standard on dispersion modeling of routine radioactive releases. This standard has cleared Nuclear Facilities Standards Committee (NFSC) balloting and will be approved by the American National Standards Institute (ANSI) later in 2012. An



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outgrowth of the NFSC rebalot resulted in a commitment to reconfigure Appendix A of ANS-2.15 into a technical paper to be published in the ANS journal, *Nuclear Technology*.

John did not have as positive news about the progress on ANS-2.16, which seems to have encountered some obstacles that were not discussed further during this teleconference. ANS-3.8.10 will be tackled by the working group once it develops a draft of ANS-2.16 that is sufficiently mature to reach NFSC Subcommittee review.

Steve Vigeant indicated that ANS-2.21 standard on ultimate heat sink has been approved and will be issued later in 2012.

Carl reported that the ANS-2.31 working group has developed a well-written first draft of the standard that is perhaps one revision away from being submitted for NFSC Subcommittee review. A future working group meeting is being scheduled to determine what needs to be done to ready the standard for the consensus review process.

Carl mentioned that the ANS-58.25 working group met in Chicago, IL on July 10, 2012 and worked through most of the 520 comments it received during its first review. Meteorological data is addressed in Section 4.7 of this standard and Section 4.8 discusses atmospheric transport and diffusion models.

Carl stated that ANSI/ANS-3.11 has new leadership with Tom Bellinger as chairman and Jennifer Call as vice-chairperson. Carl and Tom will discuss a path forward for determining whether the standard should be reaffirmed or revised since it has a 2015 sunset, while Carl is in Oak Ridge, TN next week.

DMCC Web Page Update

Cliff Glantz mentioned that there were no new additions to the DMCC web page since the last teleconference. The March 2012 DMCC teleconference highlights and the 2012 DMCC Meeting Report will be posted soon.

Forecast Models and GPUs

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



Old Business

DMCC Annual Meeting Planning (Activity Completed)

Carl reviewed the highlights of the 19th DMCC Meeting that was held on Monday, May 14, 2012 in Seattle, WA. A Joint Session with the SCAPA and the HASC was again included this year after the conclusion to the DMCC meeting. John Merrick effectively moderated the DMCC Meeting, as he has for the past three years.

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 ask the DMCC to review the draft document. No additional discussion at this teleconference.

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 will follow up with the training subcommittee to determine if this need is still viable.

OFCM Annual DOE Operational and Research Support (Activity Completed)

Carl mentioned that the condensed version was provided to OFCM for its FY13 report. The planned update to the longer version has not gone as well as hoped with updated information received from only two sites. Due to lack of interest, Carl decided that this initiative should be cancelled.

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



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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.

PNL-20734 Sigma Theta Report (Activity Completed)

Chuck Hunter stated that two additional reports have been prepared on dispersion modeling issues: (1) more detailed version of PNL-20714; and, (2) deposition velocity. He will provide these to the DMCC and they will be posted on the website.

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.

New Business

ALOHA-HYSPLIT (Activity Continuing)

Mark Miller briefed that he has been working for about two years with Roland Draxler and Glenn Rolfe of Air Resources Laboratory (ARL), Silver Spring, MD on an activity initially funded by the Department of Homeland Security (DHS) through NOAA's Global Sciences Division (GSD) to combine the ALOHA source strength modules with the HYSPLIT atmospheric transport and diffusion code. Work performed by ARL Field Research Division (FRD) in Idaho Falls, ID, allows the selection of latitude and longitude for the release point and plume dose and concentration overlays using Google maps. A test bed website has been set up, and Mark is looking for feedback from this beta version. The next step will be to web-enable ALOHA about 18 months from now. This will be managed through the NOAA Web Operations Center (WOC). The project is also looking to eliminate the hard-wired 60-minute maximum duration in the new ALOHA-HYSPLIT code. Mark intends to demonstrate the ALOHA-HYSPLIT during the next DMCC teleconference through a "Go-To-Meeting" link.



Round Robin

The following updates were shared:

DOE Site	Presenter	Discussion
BNL	None	No report
Hanford and PNNL	Cliff Glantz	Ken Burk was not able to participate in this teleconference. As a meteorological data user at Hanford, Cliff was unable to comment on any operational issues.
INL	Kirk Clawson	ARL FRD is currently working on renewing the five-year Interagency Agreement between ARL FRD and the Idaho National Laboratory. As a part of this, the Memorandum of Agreement, which defines the scope of the work, is being renewed.
LANL	Jean Dewart	<p>Requested SODAR survey to assist in purchasing new SODAR system to replace old one which failed last winter and was determined to be non-repairable.</p> <p>Looking at cell phone towers on Parajito Mountain to host an anemometer, but the outcome is uncertain.</p> <p>FY12 budget is very tight due to overall reduction in LANL budget.</p>
LLNL	Tony Wegrecki	<p>Installed Uninterruptible Power Systems at the LLNL and Site 300 meteorological towers and for the data server.</p> <p>Installed a new plotting package where the user can select it or the old package.</p> <p>Has not yet completed self-assessment due to other workload and will resume it next month.</p>



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DOE Site	Presenter	Discussion
NNSS	Walt Schalk	<p>In the midst of a major overhaul of the MEDA stations, which are no longer being supported by the vendor. Most of the new towers and half of the new mesonet sensors and equipment have been ordered.</p> <p>NNSS culture has finally accepted the need for meteorological services.</p> <p>Supported an experiment with high altitude balloon launches and specific on-scene weather forecasts and surveillance. Timely lightning alerts were a significant component of the support as the SW Monsoon westward push provided abundant moisture to trigger numerous thunderstorms in the experiment area and cause safety stand-downs.</p>
OFCM	None	No report
ORNL	None	No report
Pantex	None	No report
SNL	None	No report
SPRO	Jim Badinger	No report
SRNL	Chuck Hunter	<p>Hired Ellie Scott, a recent St. Louis University graduate, who will be performing applied support work and supporting emergency response consequence assessment. She will be attending the upcoming NUMUG meeting.</p> <p>The self-identified MACCS2 safety basis and Defense Nuclear Facility Safety Board (DNFSB) issues with sigma-theta data has been resolved and two White Papers have been published; one on stability class and the other on roughness length calculated from sonic anemometer data. A letter of approval from Tom D'Agostino NNSA/HQ, was received.</p>
WIPP	None	No report
Y-12	Tom Bellinger	No major issues to report.



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Next DMCC Teleconference

The next DMCC teleconference is scheduled for **Tuesday, September 18, 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 will be conducted 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.**



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 will be conducted the week of August 6-10, 2012, coupled with an 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): The NFSC closed balloting on the ANS 2.15 Standard on March 7, 2012 after receiving 85% response, including: 9 approved, 6 approved with comments, 3 not approved, 4 abstained, 4 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. 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. **First draft is under working group review (Due 7/27). 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**



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ANSI/ANS-3.11 ([Bellinger/Call](#)): 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. **Tom Bellinger(Y-12) is the new working group chair and Jennifer Call (TVA) is the new Co-Chair. 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 working group met in Chicago on July 1–112 to address JCNRM comments. ACTIVITY PROCEEDING**

Forecast Models and GPUs

Erik Kabela reports that the new computer cluster has arrived at ORNL. Once set-up, the plan is to run WRF and possible RAMS. In the future, a thought is that something similar to ARPS could be incorporated.

DMCC Web Page

Nothing new to report at this time.