



**DMCC PROGRAM TELECONFERENCE 07-03**  
TUESDAY, JULY 12, 2007; 11:00 AM-12:00 M EDT

**Teleconference 07-03 Participants**

Tom Bellinger, BWXT Y-12  
Rick Eckman, INL  
Dorothy Cohen, ORISE  
John Ciolek, AlphaTRAC  
Jim Fairbent, NA-41  
Paul Fransioli, YMPO  
Scot Johnson, LANL  
Carl Mazzola, Shaw Environmental  
Judy Ryland, ORISE

**Teleconference Highlights**

**I. Roll Call**

Carl Mazzola conducted a roll call and acknowledged that nine (9) individuals involved in the DMCC program were present. Ten (10) individuals participated in the March 20, 2007 teleconference. The teleconference was called to order and Carl thanked Dorothy Cohen for setting up the call.

**II. Administrative Matters**

Carl Mazzola led the discussion on three DMCC administrative matters.

**A. Previous Teleconference Highlights and Action Items**

Carl Mazzola indicated that this is the fourth DMCC teleconference, and these teleconferences will continue to be held on a once every two month basis. The minutes of the March 20, 2007 teleconference have been developed and posted on the DMCC portion of the EMI SIG web page.



**DMCC PROGRAM TELECONFERENCE 07-03**  
**TUESDAY, JULY 12, 2007; 11:00 AM-12:00 M EDT**

**B. DMCC Action Item Status**

Carl Mazzola briefly discussed the latest updated DMCC Program Action Item (AI) listing. At the time of the last teleconference, 17 action items were open. Seven (7) new action items were opened during the DMCC Meeting, and the progress on these AIs will be discussed in today's conference call. The existing DMCC AI list will be updated on the basis of information exchange during this teleconference and other relevant events.

**C. American Nuclear Society (ANS) Topical Meetings on Emergency Preparedness & Response (EP & R)**

Carl Mazzola mentioned that the 10<sup>th</sup> EP & R meeting will take place at the Hotel Albuquerque in Old Town Albuquerque, NM, on March 9-12, 2008. A Call for Papers has been posted (<http://cimar.mae.ufl.edu/rrsd/>) and has been forwarded to the SCAPA and DMCC list serves. Authors should submit a 500-word abstract via the ANS Community of Science (COS) electronic submission system by August 1, 2007 (COS system will be available to accept abstracts by April/May 2007). Abstracts will be reviewed by the technical program committee between August 2, 2007 and September 15, 2007. Authors will be notified of the acceptance or rejection of their abstracts by September 30, 2007. Full-length paper submissions are due by November 11, 2007.

The following topics are applicable to the DMCC: (1) Guides, standards, and regulations; (2) Late breaking research/issues; (3) Hazardous materials and consequence analysis; (4) Consequence modeling at DOE/NNSA facilities; (5) International consequence assessment modeling; (6) Severe weather support at nuclear facilities; (7) Software quality assurance requirements for EP&R; (8) Actual events and exercises - lessons learned; (9) Emergency response systems and equipment; and, (10) New and emerging technologies for Emergency Preparedness & Response.

**III. Assist Visit Status**

Carl Mazzola discussed the status of the ongoing DMCC Assist Visit (AV) program, which includes activities at nine DOE/NNSA sites.



**DMCC PROGRAM TELECONFERENCE 07-03**  
**TUESDAY, JULY 12, 2007; 11:00 AM-12:00 M EDT**

**A. Pantex Site**

**AI 06-01:** Chuck Rives was not available to discuss possible DMCC support to a planned Pantex self-assessment of its meteorological program. Pantex had its last AV in April 1997. **ACTIVITY PROCEEDING.**

**B. Hanford Site**

**AI 06-02:** Cliff Glantz, Hanford, had earlier indicated that a DMCC AV may be requested some time in the future once the determination of the upcoming bid for meteorological monitoring services is established. Carl Mazzola contacted Carl Berkowitz, the week of November 13, 2006 and January 31, 2007. During both conversations, there was strong interest to having an AV. A follow-up discussion is scheduled for August 2007. **ACTIVITY PROCEEDING.**

**C. Idaho National Laboratory (INL)**

**AI 06-03:** Kirk Clawson, INL, had earlier indicated that he intends to formally respond to the DMCC regarding its September 2004 AV observations and recommendations. Kirk mentioned that the AV provided him a strong platform to discuss the limitations associated with the flat funding ARL FRD has been receiving since the late-1990s. DOE/ID agreed in principle to increase the funding level. Carl met with Kirk in May 2007 to discuss a follow-up Assist Visit. Kirk mentioned that he will likely have that Assist Visit in 2008. **ACTIVITY PROCEEDING.**

**D. Nevada Test Site (NTS)**

**AI 06-04:** Ed Forness, DOE/NV, had earlier indicated that NTS may be interested in an AV in the spring or summer of 2007. No further discussion at this teleconference. **ACTIVITY PROCEEDING.**

**E. Oak Ridge Reservation: Y-12**

**AI 06-05:** Tom Bellinger had earlier indicated that he has an interest in a follow-up to the May 2004 Y-12 AV. Tom will discuss the costs and funding options separate from this teleconference, and will follow-up on the request. **ACTIVITY PROCEEDING.**



**DMCC PROGRAM TELECONFERENCE 07-03**  
**TUESDAY, JULY 12, 2007; 11:00 AM-12:00 M EDT**

**F. Waste Isolation Pilot Plant (WIPP)**

**AI 06-09:** Joel Siegel, WIPP, had earlier indicated that he has not yet had an opportunity to address the August 2005 AV observations and recommendations due to present program manpower constraints. DMCC will be discussing a follow-up AV for the summer 2008 timeframe, which is the general three-year frequency for follow-up AVs. Joel was unavailable to discuss this further. **ACTIVITY PROCEEDING.**

**G. Los Alamos National Laboratory (LANL)**

**AI 06-08:** An AV was performed at the Los Alamos National Laboratory (LANL) in August 2006. Scot Johnson had indicated he was very pleased with the AV and has already begun work on selecting an improved three-dimensional mass-consistent atmospheric transport and dispersion model, adding a meteorological tower and instrument surveillance program and augmenting the meteorological data quality assurance. **ACTIVITY PROCEEDING.**

**H. Brookhaven National Laboratory (BNL)**

**AI 06-14:** A Statement of Work (SOW) to perform an AV at BNL was sent to Vic Cassella on October 15, 2006. BNL is evaluating its funding options and when it would like the AV performed. However, it is severely constrained by the CR which is resulting in BNL reductions in force. Vic was not available for this teleconference. **ACTIVITY PROCEEDING.**

**I. Savannah River National Laboratory (SRNL)**

**AI 07-03:** At the 2007 DMCC Meeting, Chuck Hunter indicated an interest in an Assist Visit at Savannah River site (SRS). Subsequent discussions resulted in a likely request for a monitoring program assist visit in spring 2008 and a consequence assessment program assist visit in spring 2009.

**IV. DMCC Projects**

Carl Mazzola led the discussion on the five active DMCC projects and provided an update on them.



**DMCC PROGRAM TELECONFERENCE 07-03**  
**TUESDAY, JULY 12, 2007; 11:00 AM-12:00 M EDT**

**AI 04-05/04-06**: The Atmospheric Sciences and Releases of Hazardous Materials (ASRHM) compendium is intended to replace Atmospheric Sciences and Power Production (ASPP), which contains materials developed in 1980 and 1981. A 215-section table of contents and section description was developed for NA-41 in June 2005 along with a cost estimate. Efforts on obtaining funding from other interested stakeholders have not yet reached fruition. NA-41 presented this project on November 18, 2005 at an Interdepartmental Committee for Meteorological Supporting Services and Research (ICMSSR) meeting of the Office of the Federal Coordinator for Meteorology (OFCM), but no agency has moved forward with any funding interest; although each entity indicated that it would like to have the final product. Once sufficient funding is secured to support this project, a review panel will be established to refine the table of contents and contents description. After that step, a bid process for the selection of contractors to develop the sections will begin. No further discussion at this teleconference. **ACTIVITY PROCEEDING.**

**AI 04-09**: At the 2004 DMCC Meeting, NNSA and DOE meteorological program managers expressed interest in providing its meteorological data for ingestion in the Meteorological Acquisition Data Ingest System (MADIS). Positive responses were received from nine DOE/NNSA sites and forwarded to Patti Miller, National Oceanic and Atmospheric Administration (NOAA), who in May 2005 indicated she would write letter requesting information and developing protocols for ingestion. Cost for accelerated ingestion per a recent communiqué from the DOC indicates that it is prohibitive to do this at this time. Therefore, DOE will continue to wait until NOAA can handle its data, which has not been scheduled. No further discussion at this teleconference. **ACTIVITY PROCEEDING.**

**AI 06-16**: At an earlier teleconference, Carl Mazzola discussed the guideline to enable meteorological program self-assessments. This work began in mid-April 2007 and Gus Vazquez mentioned that this product would be useful for HS-64 (i.e., Office of ESH Evaluation) and HS-63 (Office of EM Oversight) to use in their oversight process. Others on the teleconference also indicated that it would be a very useful product for self-assessments and assessments involving the DMCC. A first draft has been provided and is under NA-41 review. Carl indicated that he hoped to have the project completed by September 2007. **ACTIVITY PROCEEDING.**

**AI 07-02**: At an earlier teleconference, Kirk Clawson asked Gus Vazquez what was the status of the DOE EH-0173T update. Gus indicated that the balance of the chapters is being updated in a similar manner to Chapter 4, Meteorology. Steve Domotor is leading the effort and the final



**DMCC PROGRAM TELECONFERENCE 07-03**  
**TUESDAY, JULY 12, 2007; 11:00 AM-12:00 M EDT**

review is expected in the Fall 2007. Gus was unavailable to update the DMCC on the progress of this effort. **ACTIVITY PROCEEDING.**

**V. DMCC Issues**

Carl Mazzola led discussion on the four active DMCC Issues and provided an update on them.

**AI 06-12:** The work on the HOTSPOT code for selection as the 8<sup>th</sup> model for inclusion in the DOE/EH Central Registry Toolbox was completed. HOTSPOT will be placed in the toolbox by January 2008 when the five critical recommendations are addressed. MACCS2, an existing toolbox code, is planning to have its latest version looked at by the Central Toolbox Registry to close many of the items in its gap report. Cliff Glantz intends to place the toolbox code information on the web page, as well as DOE O 414.1C and DOE G 414.1-4.

With respect to the SQA associated with meteorological data acquisition, Paul Fransioli indicated that he would take the lead looking into this; especially with respect to data logger accuracies. **ACTIVITY PROCEEDING.**

**AI 06-13:** Rob Addis and John Merrick are involved in an initiative to utilize ensemble modeling techniques at DOE and NNSA sites to reduce the amount of uncertainty in consequence assessment modeling. There is European interest in an ensemble exercise in the United States and NARAC and NTS are also involved. Source terms and accident scenarios are being developed. No DOE or NNSA sites have expressed interest in participating at this time. **ACTIVITY CAN BE CLOSED.**

**AI 07-04:** During the 2007 DMCC Meeting, a need to have the National Center for Environmental Programs (NCEP) revise its Rapid Update Code (RUC) resolution was identified relative to mesoscale forecast modeling. DMCC committed to write letter to NCEP. No discussion during this teleconference. **ACTIVITY PROCEEDING.**

**AI 07-09:** During the 2007 DMCC Meeting, Mark Miller agreed to provide ALOHA patch so 60-minute limitation can be overridden for non-emergency planning applications. No discussion during this teleconference. **ACTIVITY PROCEEDING.**



**DMCC PROGRAM TELECONFERENCE 07-03**  
**TUESDAY, JULY 12, 2007; 11:00 AM-12:00 M EDT**

**VI. Status of Related Federal/Private Sector Programs**

Carl Mazzola led the discussion and provided an update on the following Federal/private sector program in which DMCC has interest.

**AI 04-11**: Carl Mazzola discussed the status of ANSI/ANS meteorological Voluntary Consensus Standards (VCSs). Five (5) standards are in preparation (ANSI/ANS-2.3, ANSI/ANS-2.15, ANSI/ANS-2.16, ANSI/ANS-2.21, and ANSI/ANS-3.8.10). The ANSI/ANS-2.3 standard for tornadoes is outdated and does not account for NRC and DOE technical approach differences. In addition the standard does not address extreme straight-line winds. This standard is expected to be ready for consensus review sometime in 2007.

A 20-member working group was established with Nuclear Regulatory Commission (NRC) and NNSA representation to develop the other four meteorological VCSs. A sixth meeting to review the ANS-2.15 first draft was held on October 12, 2006, concurrent with NUMUG meeting. This standard addresses atmospheric transport and dispersion for routine releases of radiological materials and chemicals. After ANSI/ANS-2.15 moves into the consensus review process, the other standards will be developed. Recently, Cliff Glantz has accepted the co-chairman role and Carl Mazzola has asked for a path forward on the preparation of the standard. Should the work continue to languish, this effort may be cancelled. **ACTIVITY PROCEEDING.**

**VII. NNSA/DOE Site Initiatives**

Carl Mazzola led the discussion and provided an update on the following three NNSA/DOE site initiatives.

**AI 07-05**: During the 2007 DMCC Meeting, Kirk Clawson agreed to make two ARL/FRD products, the INL Wind Pattern Study and INL Climatology Update, available to DMCC members. Rick Eckman mentioned that a draft of the climatology is ready for Kirk Clawson's final approval. After it is published, it will be placed on the DMCC web page.

Rick also explained the wind pattern study which is based on a cluster analysis. Eight patterns of wind flows have been identified at INL which morph into each other. The technique shows how each of the wind patterns morphs into a different identifiable pattern. This is valuable to the emergency responder regarding increased confidence in forecasted



**DMCC PROGRAM TELECONFERENCE 07-03**  
**TUESDAY, JULY 12, 2007; 11:00 AM-12:00 M EDT**

wind fields. The manuscript is in final NOAA review and will be made available to the DMCC membership soon after it is published. **ACTIVITY PROCEEDING.**

**AI 07-06:** During the 2007 DMCC Meeting, Walt Schalk agreed to make NTS-developed fire forecasting tool available to DMCC members. Walt was unavailable to discuss this item further. **ACTIVITY PROCEEDING.**

**AI 07-08:** During the 2007 DMCC Meeting, John Ciolek offered to provide the OSSE report that addressed locating meteorological towers to maximize their influence on wind field generation. John explained that the technique is based on a cumulative probability plot. Each sensor that is added to the array of sensors will reduce the error. John emphasized that this technique needs to be tested in the field and AlphaTRAC is looking for partners in this validation effort. Paul Fransioli, Scot Johnson, Tom Bellinger, and Rick Eckman showed interest in receiving this information, but there did not appear to be any interest in partnering. **ACTIVITY PROCEEDING.**

**VIII. DMCC Web Page Report**

Carl Mazzola discussed new additions to the DMCC web page which included links to DOE/NNSA meteorological program sites. Discussion was also initiated relative to a DMCC blog.

**AI 07-01:** At an earlier teleconference, Cliff Glantz asked all of the teleconference attendees to identify new publications to be posted or linked to the website, inclusive of climatology studies. **ACTIVITY PROCEEDING.**

**AI 07-07:** During the 2007 DMCC Meeting, the membership requested that a DMCC blog be developed. Cliff Glantz to implement, but was unavailable to discuss progress on this action item. **ACTIVITY PROCEEDING.**

**IX. New Business: Round Robin**

Carl Mazzola led a round robin discussion that included four participants.



**DMCC PROGRAM TELECONFERENCE 07-03**  
**TUESDAY, JULY 12, 2007; 11:00 AM-12:00 M EDT**

**A. Paul Fransioli (YMPO)**

Paul indicated that the Yucca Mountain meteorological program is in the performance confirmation stage and has remained intact throughout the precarious licensing process of the repository. Moreover, the program has supported the ES & H organization relative to worker health and safety. Paul may need a model associated with volcanic activity and Carl Mazzola recommended the VAFTAD model.

**B. Tom Bellinger, Y-12**

Tom mentioned that the new East meteorological tower and instruments and new ASC-3000 Aerovironment SODAR are up and running, following the recommendations included in the 2004 DMCC Assist Visit. Tom is not pleased with the range of the new SODAR and plans to move it approximately 100 feet which may prove to be a better location. Tom stated that he would welcome an Assist Visit update and will raise that need to his management.

**C. Rick Eckman, INL**

Rick first indicated that BEA, the new INL M & O Contractor use the NARAC code and ARL/FRD interprets the results. ARL/FRD also provides mesonet connectivity. Rick also discussed the new model that INL was developing. The new model relies on forecasted data and not onsite data which is typical of HYSPLIT. Moreover, there is a need to develop a means of driving HYSPLIT with observed winds. ARL/FRD is developing a White Paper on the use of the HYSPLIT pre-processor.

Rick also stated that the RSAC-6 code at INL is used for NESHAP and other regulatory applications.

**D. Scot Johnson, LANL**

Scot opined that LANL plans to make NARAC its primary consequence assessment code since it has lost confidence in its MIDAS code and a replacement code is many years away. This decision will meet the requirements of DOE O 151.1C.



**DMCC PROGRAM TELECONFERENCE 07-03**  
**TUESDAY, JULY 12, 2007; 11:00 AM-12:00 M EDT**

**X. Next DMCC Conference Call**

Carl Mazzola tentatively scheduled the next DMCC Conference call for **Thursday, September 20, 2007 at 11:00 a.m. EST.**

**XI. Adjournment**

The teleconference was adjourned at **11:46 a.m. EST.** Carl thanked everyone for their time and their contributions.

**XII. DMCC Program Action Item (AI) Status**

Based on the information exchange from the DMCC Meeting and this teleconference, seven new AIs were opened, and one AI was closed, making a total of 23 AIs.

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

- Existing AIs that are not closed are colored green;
- New AIs are colored yellow; and,
- AIs to be closed are colored blue.

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