

DMCC PROGRAM TELECONFERENCE 06-01
TUESDAY, OCTOBER 31, 2006; 10:30 AM-11:30 AM

Teleconference 06-02 Participants

Tom Bellinger, BWXT/Y-12
Vic Casella, BNL
Dorothy Cohen, ORISE
Rick Eckman, INL
Paul Fransioli, YMPO
Cliff Glantz, PNNL
John Harris, OROO
Carl Mazzola, Shaw Environmental
Walt Schalk, ARL SORD (NTS)
Gus Vazquez, HSS-21

Teleconference Highlights

I. Roll Call

Carl Mazzola conducted a roll call and acknowledged that 10 individuals involved in the DMCC program were present. Ten individuals also participated in the August 29, 2006 teleconference. The teleconference was called to order and Carl thanked Dorothy Cohen for setting up the call.

II. Administrative Matters

Carl Mazzola and Walt Schalk led the discussion on four DMCC administrative matters.

A. Previous Teleconference Highlights and Action Items

Carl Mazzola indicated that this is the second DMCC teleconference, and these teleconferences will continue to be held on a once every two month basis. The minutes of the August 29, 2006 teleconference has been developed and will be posted on the DMCC portion of the EMI SIG web page.

B. DMCC Action Item Status

Carl Mazzola briefly discussed the latest updated DMCC Program Action Item (AI) listing. At the time of this teleconference, 17 action items were open, 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.

DMCC PROGRAM TELECONFERENCE 06-01
TUESDAY, OCTOBER 31, 2006; 10:30 AM-11:30 AM

C. 13th Nuclear Utility Meteorological Data User Group (NUMUG) Meeting

Carl Mazzola discussed the highlights of the recent meeting of a commercial nuclear meteorologist trade group, NUMUG. There were 29 attendees from utilities, regulators, consultants, and instrument manufacturers. The Nuclear Regulatory Commission (NRC) presented its reasoning on the just-issued DG-1164 (i.e., Regulatory Guide 1.23) which addresses meteorological monitoring requirements for civilian nuclear meteorological programs. NUMUG will be formally commenting on the DG. Vic Casella, Cliff Glantz, Matt Parker (SRS), and Paul Fransioli, attended to represent DOE/NNSA interests. Dorothy Cohen had earlier posted the NUMUG Meeting agenda on the DMCC list serve.

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

Carl Mazzola mentioned that the 10th EP & R meeting continues in the final planning stages and will take place in Albuquerque, NM, March 8-12, 2006. A Call for Papers will be out shortly, and as soon as it is ready, it will be forwarded for posting on the DMCC list serve.

III. Assist Visit Status

Carl Mazzola and Walt Schalk discussed the status of the ongoing DMCC Assist Visit program, which includes activities at eight DOE/NNSA sites.

A. Pantex

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

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 will be contacting Carl Berkowitz, the week of November 13. **ACTIVITY PROCEEDING.**

DMCC PROGRAM TELECONFERENCE 06-01
TUESDAY, OCTOBER 31, 2006; 10:30 AM-11:30 AM

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 was unable to participate in this teleconference, but intends to actively support it in the future. Rick Eckman, INL, supported this teleconference. **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. **ACTIVITY PROCEEDING.**

E. Oak Ridge Reservation: Y-12

AI 06-05: Tom Bellinger participated in the teleconference, but there was no discussion on the progress regarding the May 2004 AV observations and recommendations. Tom had earlier indicated that he has an interest in a follow-up AV. **ACTIVITY PROCEEDING.**

F. Waste Isolation Pilot Plant (WIPP)

AI 06-09: Joel Siegel, WIPP, had earlier indicated that WIPP 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 frequency for follow-up AVs. **ACTIVITY PROCEEDING.**

G. Los Alamos National Laboratory (LANL)

AI 06-08: An AV was performed at the Los Alamos National Laboratory (LANL) on August 8-9, 2006 by Walt Schalk and Carl Mazzola, representing the 11th AV performed by the DMCC since April 1996. The final report has been submitted to LANL. Scot Johnson, LANL 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. **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 Casella on October 15, 2006. BNL is evaluating its funding options and when it would like the AV performed. **ACTIVITY PROCEEDING.**

DMCC PROGRAM TELECONFERENCE 06-01
TUESDAY, OCTOBER 31, 2006; 10:30 AM-11:30 AM

IV. DMCC Projects

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

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, such as the Environmental Protection Agency (EPA), Department of defense (DoD), Department of Commerce (DOC), Department of Interior (DOI) and the Department of Agriculture (DOA) has 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. **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 during this teleconference. **ACTIVITY PROCEEDING.**

AI 06-10: DOE/EH-41, now DOE/HHS-21, funded the revision of Chapter 4 of DOE/EH-0173T, which was issued in February 2005. The revised summary and revised references was issued in February 2006. There are more than 30 cross-references to ANSI/ANS-3.11 (2005), giving this technical document essential equivalence to ANSI/ANS-3.11 (2005). DOE/HHS-21 plans to next have a contractor develop a crosswalk of the summary section with the DOE O 231.1 section on environmental monitoring programs. No further discussion during this teleconference. **ACTIVITY PROCEEDING.**

DMCC PROGRAM TELECONFERENCE 06-01
TUESDAY, OCTOBER 31, 2006; 10:30 AM-11:30 AM

AI 06-11: DMCC has been developing the DOE Meteorological Programs appendix for the OFCM Annual Federal Plan on an annual basis since 1997. The appendix includes research and operational program highlights from 15 NNSA/DOE sites. Work on the OFCM FY08 Annual Federal Plan is scheduled to begin in January 2007. No further discussion during this teleconference. **ACTIVITY PROCEEDING.**

V. **DMCC Issues**

Walt Schalk and cliff Glantz led on the three active DMCC Issues and provided an update on them.

AI 05:01: Walt Schalk discussed the lightning safety initiative that he just completed and which he presented at the 2006 DMCC Meeting. In October 2002, thunderstorms in the vicinity of the NTS resulted in a safety and health problem with a worker. In response to this incident, members of the Defense Nuclear Facility Safety Board (DNFSB) that were interested in lightning safety, met at NTS in early 2003 to examine the adequacy of the DOE/NV lightning protection program. The resultant work to improve lightning safety at the DOE/NNSA sites resulted in two NOAA reports which addressed the existing NTS lightning safety program. This included the issuance of lightning alerts, frequency of forecasts, and lightning events. A lightning focus group was formed at NTS which evaluated the existing capabilities versus the available technologies. Pantex, as well as the Kennedy Space Center (KSC); the latter having the premier lightning protection system, were visited by the focus group, which ultimately determined that the lightning protection program at NTS was more than adequate. NTS management formally responded to the DNFSB and implemented a lightning protection order which mandated the issuance of lightning alerts. DNFSB has had the final report for more than a year and has yet to respond. Since this report is useful to many, if not all, DOE and NNSA sites, Walt Schalk will make it available to DMCC members through a web page posting. This activity will be monitored until DNFSB formally responds. **ACTIVITY PROCEEDING.**

DMCC PROGRAM TELECONFERENCE 06-01
TUESDAY, OCTOBER 31, 2006; 10:30 AM-11:30 AM

AI 06-12: Cliff Glantz discussed the ongoing DOE initiative regarding Software Quality Assurance (SQA). There are three levels, as defined in the DOE O 414.1C and DOE G 414.1-4 that are used to determine applicable SQA requirements for safety software. Level A is of the highest concern and is applied to software that keeps radiological materials in a safe configuration. Levels B and C are applied to other safety-related software applications, including applications that may involve consequence assessment and hazard assessment modeling. Cliff believes from his discussion with Central Registry and reading of the order and guide and how safety software is defined, that this SQA initiative may ultimately impact the meteorological data that is used as input for consequence assessment and hazards assessment codes.

Cliff made a 10-minute presentation at the NUMUG meeting in St. Louis, MO on October 12, 2006 on this topic. Many of the utility meteorological program managers and meteorological instrumentation vendors were concerned about this, and some indicated they had previously considered this as a possibility. Vendors need to know of this upcoming SQA initiative so that they can improve their software design and its supporting documentation. DMCC may ultimately develop White Papers on this topic and meet and discuss it with software vendors. Cliff also stated that the HOTSPOT code was selected as the 8th model for inclusion in the DOE/EH Central Registry Toolbox, and work on this effort is expected to be completed by December, 2006.

Cliff intends to place the toolbox code information on the web page, as well as DOE O 414.1C and DOE G 414.1-4. **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. Rob asked if any other DOE or NNSA sites would be interested in participating and will send information about the initiative over the DMCC list serve. No further discussion at this meeting.

VI. Status of Related Federal/Private Sector Programs

Carl Mazzola led the discussion and provided an update on the following two Federal/private sector programs that DMCC has interest.

DMCC PROGRAM TELECONFERENCE 06-01
TUESDAY, OCTOBER 31, 2006; 10:30 AM-11:30 AM

AI 04-11: Carl Mazzola discussed the status of ANSI/ANS-3.11 (2005) and other meteorological Voluntary Consensus Standards (VCSs). He indicated that at the 2004 DMCC Program Meeting with NA-41, the status of that standard and five other standards in preparation (ANSI/ANS-2.3, ANSI/ANS-2.15, ANSI/ANS-2.16, ANSI/ANS-2.21, and ANSI/ANS-3.8.10) was discussed. 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. On 9/19/05, the ANSI/ANS-2.3 working group held first meeting. This standard is expected to be ready for consensus review in 2007.

A 20-member working group was established with Nuclear Regulatory Commission (NRC) and NNSA representation to develop ANSI/ANS-2.15, ANSI/ANS-2.16, ANSI/ANS-2.21, and ANSI/ANS-3.8.10. 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. **ACTIVITY PROCEEDING.**

AI 06-15: The NRC presented its reasoning on the just-issued DG-1164 (i.e., Regulatory Guide 1.23) at the 10/12/06 NUMUG Meeting, which addresses meteorological monitoring requirements for civilian nuclear meteorological programs. NRC indicated comments are due by November 27, 2006. NUMUG will be formally commenting on the DG and DMCC will provide its comments through NUMUG. NUMUG Steering Committee draft comments were placed on the NUMUG list-serve on November 9. **ACTIVITY PROCEEDING.**

VII. DMCC Web Page Report

AI 06-06: Cliff Glantz mentioned that the DMCC web page is undergoing a full redesign to increase its visual appeal and improve its functionality. It will go live on November 3. Cliff asked each participant to provide ideas for additional postings and web page structure. **ACTIVITY PROCEEDING.**

VIII. New Business: Round Robin

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

DMCC PROGRAM TELECONFERENCE 06-01
TUESDAY, OCTOBER 31, 2006; 10:30 AM-11:30 AM

A. INL (Rick Eckman)

Rick inquired whether HYSPLIT, A DOC three-dimensional atmospheric transport and dispersion model, is a DOE Central Registry code, or if it is being considered as a candidate. Cliff Glantz indicated that it is not and no one has come forward to sponsor it for inclusion in the Central Registry toolbox. Rick mentioned that he was interested in this since Air Resources Laboratory Field Research Division (ARL FRD), which manages the meteorological program at INL, is considering this model to support the Idaho emergency preparedness and response program, as part of its 5-year renewal of its Interagency Agreement (IA) with DOE/ID.

B. HSS-21 (Gus Vazquez, DOE/HSS-21)

Gus reported that DOE/EH no longer exists and that it has been replaced by DOE/HSS. Gus offered to send the new organizational charts to all who request them. John Harris requested a copy.

Gus also mentioned that the Environmental Protection Agency (EPA) has issued its draft of the revised Protective Action Guides (PAGs) for Federal interagency review, which will be completed by November 1. Steve Domotor from HSS is taking the lead for DOE. It is hoped that a consensus of the Federal agencies will be reached by the end of 2006 and a full public review will commence in early 2007. Carl Mazzola indicated that he had spoken with Ed Tupin of EPA in Pasadena, CA on October 18 and Ed had indicated that the PAG values were not changed, but the dosimetry was, and is now based on ICRP-68/72.

C. Y-12 (John Harris/OROO)

John mentioned that he is concerned that the 30-year old meteorological tower and equipment at Y-12 may yield problems, especially with the possibility that the meteorological data may be undergoing SQA scrutiny. Paul Fransioli shared that he is addressing this possibility at Yucca Mountain and advised that the software should have an automated input file.

AI 06-16: Carl Mazzola discussed that NA-41 has expressed willingness to support the development of a DMCC product and asked for suggestions. Gus Vazquez suggested a worksheet to review 40 CFR 61 Subpart H documents. Other suggestions included developing a registry for meteorological monitoring systems, a revised compendium of consequence assessment atmospheric dispersion models, and a worksheet to enable meteorological program self-assessments. **ACTIVITY PROCEEDING.**

DMCC PROGRAM TELECONFERENCE 06-01
TUESDAY, OCTOBER 31, 2006; 10:30 AM-11:30 AM

IX. Next DMCC Conference Call

Carl Mazzola tentatively scheduled the next DMCC Conference call for **Tuesday, January 9, 2007 at 10:30 a.m. EDT.**

X. Adjournment

The teleconference was adjourned at **11:30 a.m. EDT.** Carl thanked everyone for their time and their contributions.

XI. DMCC Program Action Item (AI) Status

Based on the information exchange from this teleconference, no AIs were closed, and 3 new AIs were opened, making a total of 20 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.

Respectfully Submitted,

Carl Mazzola

Carl Mazzola