



Highlights
SCAPA Program Teleconference 09-04
Thursday, August 20, 2009; 12:30 PM-1:30 PM EST

Participants:

| | | |
|------------------------|-------------------------|---------------------------|
| Jayne-Ann Bond, ATL | Vern McDougall, ATL | Brad Salmonson, INL |
| Doug Craig, ATL | John Nasstrom, NARAC | Joe Terranova, BNL |
| Dave Freshwater, NA-41 | Rocky Petrocchi, ATL | Richard Thomas, Intercet |
| Cliff Glantz, PNNL | Bill Possidente, NS Tec | Tom Tuccinardi, Excalibur |
| John Harris, DOE/OROO | Jim Powers, NA-41 | Gustavo Vazquez, HS-21 |
| Po-Yung Lu, ORNL | Jeremy Rishel, PNNL | Kerry Ward, INL |
| Peter Martin, EOTA | Frank Roberto, INL | Gary Winner, ANL |
| Carl Mazzola, Shaw Env | Diane Rodi, ANL | Xiao-Ying Yu, PNNL |

I. Roll Call

Carl Mazzola conducted a roll call, noting that 24 emergency management professionals involved in various aspects of the SCAPA program were present. The teleconference was called to order.

II. Administrative Matters

Carl Mazzola addressed three administrative matters:

2009 SCAPA Meeting: The May 7, 2009 SCAPA Meeting was conducted in San Francisco, Calif., with 21 presentations from all SCAPA working groups and two guest speakers. Approximately 50 individuals attended. The SCAPA meeting report is posted on the SCAPA web page.

Previous Teleconference Highlights: The approved highlights from the June 17, 2009 SCAPA Program Teleconference 09-03 are posted on the EMI SIG/SCAPA website.

SCAPA Action Item and Items of Interest Status: An updated SCAPA Program Action Item (AI) listing was provided with the meeting agenda. In addition, a new product—"items of interest" (IoI) —is provided. The IoI reports on items of interest to SCAPA members (e.g., actions by the TEEL Advisory Group, DOE-HSS additions to the DOE Central Registry for safety software) that are not SCAPA directed activities. At the time of this teleconference, two (2) AIs remained open and there were eight (8) IoIs. Progress on each of these AIs and IoIs was discussed during the teleconference.

III. SCAPA Working Group Activities

A. Chemical Exposures Working Group (CEWG) (Doug Craig, Chairperson)

Release of PAC/TEEL Revision 25: Doug Craig reported that PAC/TEEL Rev 25 is approved by NA-41; Advanced Technology Laboratories (ATL), Inc. will publish it on August 21, 2009. As in previous revisions, 2009 AEGL, 2009 ERPG and recent regulatory updates are included. Tom Tuccinardi

mentioned that an EMU will soon announce the release of PAC/TEEL Rev 25.

ITEM OF INTEREST CLOSED.

Update of PAC/TEEL data for Concentration-Dependent Chemicals: Doug reported that the update of the regulatory limit values used to derive PAC/TEEL values is complete. This update is of particular importance for chemicals whose PAC/TEEL values are driven by concentration-dependent regulatory limits. These updated data appear in PAC/TEEL Rev 25. Po-Yung Lu's team spearheaded this effort. **ACTIVITY PROCEEDING.**

Update of PAC/TEEL data for Toxicity-Dependent Chemicals: A major activity is underway to update PAC/TEEL values for the approximately 750 chemicals whose health effects are toxicity dependent. Po-Yung Lu's team started this review with the oldest chemicals in the PAC/TEELs data set (i.e., chemicals added through mid-1997) where RTECS is the primary source of the toxicity data. **ACTIVITY PROCEEDING.**

PAC/TEEL Revision 26: Doug stated that the next major version of the PAC/TEEL data set (Rev 26) contains updates on the approximately 750 toxicity-dependent chemicals listed in PAC/TEEL Rev 25. Cliff Glantz said that NA-41 will decide on a case-by-case basis whether requests from DOE/NNSA to add 4 or 5 new chemicals to the data set will be allowed. **ACTIVITY PROCEEDING.**

Publish PAC/TEEL "Cookbook": Version 7.4 of the PAC/TEEL "Cookbook" that describes the process for developing PAC/TEEL values for chemicals, and supports a requirements document, is under review by NA-41 and will be provided to the review team shortly. **ACTIVITY PROCEEDING.**

B. Chemical Mixtures Working Group (CEWG) (Doug Craig, Chairperson)

Release of Updated Chemical Mixture Methodology: Rocky Petrocchi reported that the revised version of CMM workbook, populated with all chemicals in PAC/TEEL Rev 24, and the CMM User's Guide is posted. New HCNs are included for approximately 1100 chemicals. There are 23 new chemicals in PAC/TEEL Rev 25 including quality-assured HCNs. Publication of a CMM workbook based on PAC/TEEL Rev 25 data is targeted for September 2009, pending NA-41 approval. **ACTIVITY PROCEEDING.**

Update of Health Code Numbers: An update of HCNs for first 700–800 chemicals in the original CMM data set is moving forward under the supervision of Xiao-Ying Yu, assisted by two PNNL interns (i.e., Philip Bouslaugh and Donna Trott). To date, 667 chemicals were reviewed and updated, as appropriate. Only 1% of updates have gone through full quality assurance testing. A major push in the area of quality assurance testing is planned over the next few months. Results of this HCN update activity will be incorporated in the next major revision of the CMM after the scheduled September release. A target date for publishing the HCN-updated version of the CMM is yet to be determined. **ACTIVITY PROCEEDING.**

Publish HCN Technical Paper: Xiao-Ying Yu will send a draft of the journal article on the HCN development procedure, which will show the differences between the old and new HCN methodologies, for SCAPA review by September 30, 2009. The goal is complete this paper and

submit it to *Journal of Applied Toxicology* in December 2009 or January 2010. John Ciolek is working with Xiao-Ying's team to develop a separate paper on a streamlined approach for applying the CMM. **ACTIVITY PROCEEDING.**

C. Consequence Assessment Modeling Working Group (Jeremy Rishel, Chairperson)

AI 06-01: Central Toolbox Registry – SQA & Candidate Models: Cliff Glantz discussed the development of the SQA Guidelines for safety-related and non-safety consequence assessment modeling. The guidelines focus on the work elements described in DOE O 414.1C and DOE Guide 414.1–4, with an emphasis on design and user documentation, configuration management, and V & V testing. The draft guidance, focusing on safety software and the SQA associated with meteorological data, will be submitted for SCAPA review before the end of FY09. Concurrent reviews by other stakeholders will be performed by the Energy Facilities Contractor Group (EFCOG) Safety Analysis Working Group (SAWG), and Subir Sen and Debra Sparkman of the DOE/HS Central Registry.

Jeremy Rishel, CAMWG Chairperson, will provide the draft guidance to all DOE/NNSA consequence assessment modelers and users of this guidance to develop a preliminary application and gap analysis. Significant progress on the SCAPA toolbox is expected by September 30, 2009. Select members of the CAMWG will review the models. Instruction on how to do this will be discussed in a CAMWG conference call scheduled for September 17, 2009. **ACTIVITY PROCEEDING.**

Consequence Assessment Guide: A Consequence Assessment Guide, developed for use by DMCC or NNSA/DOE meteorological program managers to conduct assessments of the meteorological components of the site's consequence assessment program is under NA-41 review. When issued, the Guide will complement the Meteorological Data Program Assessment Guide. No additional discussion occurred during this teleconference. **ACTIVITY PROCEEDING.**

HOTSPOT 2.07 in DOE Central Registry: An assessment team with 3 SCAPA members continues to evaluate HOTSPOT 2.07 critical area responses for it to become 8th model in Central Registry Toolbox. Several conference calls have indicated that some, but not all of the five critical recommendations, can be closed. John Nasstrom noted that the review team has provided good comments of a comprehensive nature. Entry of HOTSPOT 2.07 into Central Registry Toolbox is expected on or before November 30, 2009. **ACTIVITY PROCEEDING.**

D. Biosafety Working Group (Frank Roberto, Chairperson)

AI 06-06: Transport & Dispersion of Biological Agents/Toxins: Frank Roberto stated that constructive comments were received from both SCAPA and NA-41 reviewers on the draft report on the transport and dispersion of biological agents and toxins. The report covers the needs and current status. It addresses existing atmospheric models, limitations for purpose of application, indoor air quality models, summary on published study modeling an indoor anthrax release, recommendations for future study and integration. It also recommends that the ID₅₀ term be used to consider relative severity of release of various viable microbial, fungal, and viral agents. All comments are incorporated and the final report is ready for publication. **ACTION ITEM CAN BE CLOSED.**



Frank also briefly discussed the upcoming National Biological Safety Association (NBSA) meeting in Miami, Fla., October 12–16, 2009. Since SCAPA BWG has an agreement and a relationship with the NBSA, Frank plans to attend this meeting. He will conduct a BWG meeting if enough members attend.

E. Source Term Working Group (Michele Wolfgram, Chairperson)

Michele Wolfgram, unavailable for the teleconference, sent a message that the STWG conducted a teleconference on July 8, 2009. The working group is in the process of addressing several issues. A key topic is a white paper associated with the DOE standard on Transuranic (TRU) waste. This white paper is expected to be issued for final review in late-August—in time for discussion at the next STWG teleconference on September 9, 2009. The STWG also discussed work by Chuck Rives on Leak Path Factor (LPF), work by Brian Baumann on dose-equivalent curies, and an evaluation by Jim Jamison of non-radiological versus radiological health effects.

IV. SCAPA Web Page and EMU Report

Cliff Glantz discussed several upcoming updates to the SCAPA web page. All of the EMI SIG web pages, including SCAPAs, will have a new color scheme, new style, and improved functionality. The biannual SCAPA web page content update is also underway, and a new web page for items of interest is being added.

V. EPA AEGLs Status

Po-Yung Lu reported on recent EPA National Advisory Committee (NAC) activities. The EPA NAC is meeting, for possibly the last time, September 9-11, 2009, at Research Triangle Park, NC. During that meeting, 19 proposed interim AEGLs will be discussed.

Dave Freshwater previously indicated that it is uncertain whether the committee will be authorized under the Federal Advisory Committee Act (FACA) for an unprecedented third time. FACA renewal will be discussed at this meeting, but since EPA is reaching the end of its list of chemicals designated for AEGL development, EPA management may consider that its mandate from Congress is fulfilled without addressing additional chemicals.

VI. AIHA ERPGs Status

Richard Thomas reported on recent Emergency Response Planning (ERP) Committee activities. The ERP plans to have a teleconference on September 16–17, 2009, to discuss 6 chemicals that are having ERPG developed for them. With respect to 2009, ERP is looking at 17 chemicals, 8 of which are updates to existing chemicals with ERPGs. The ERPGs for these 17 chemicals are expected to be available by January 31, 2010.

VII. EPA PAGs Status

Gustavo Vazquez discussed the status on the Protective Action Guidelines (PAGs). He spoke with an EPA representative and learned that although the previous administration had approved the new PAGs, the Obama Administration appointed a new administrator about a month ago who wants to review them. It is unclear what steps need to be taken or when the new PAGs will be issued.

VIII. Round Robin

TAG: Tom Tuccinardi reported that the PAC/TEEL development for 24 biotoxins is on hold until agreement on certain issues is reached. This issue will be the topic of a future TEELs Advisory Group (TAG) Teleconference.

NARAC FAQs: John Nasstrom mentioned that a set of Frequently Asked Questions (FAQs) related to NARAC access and connectivity is under development. These FAQs address questions associated with NARAC use for Emergency Preparedness Hazard Assessments (EPHAs) and Documented Safety Analyses (DSAs). Comments were received from SCAPA stakeholders and these FAQs may be issued within a month.

NARAC Web Version 2.2: John mentioned that NARAC web version 2.2 was released which provides the user a selection of respirable and non-respirable release fractions. In addition, the user is provided with mouse-over plume concentration capabilities.

PAC/TEEL External Review Committee: Dave Freshwater identified Dr. George Rush, Susan Ripple, and Richard Thomas, as members of an independent external review committee commissioned by NA-41 to review the PAC/TEEL methodology. The committee held a teleconference on August 7, 2009, and will meet in Research Triangle Park, NC, on September 10, 2009, to discuss the status of its evaluation. A final report is expected by December 31, 2009.

Nitric Acid Spill at ETPP: John Harris discussed the Operational Emergency (OE) declared at East Tennessee Technology Park (ETTP) in Oak Ridge, Tenn. A protective action of shelter-in-place was declared after 100–150 gallons of nitric acid overflow during a filling operation. This protective action was determined to be incorrect and a number of lessons learned are being developed.

EOTA Consequence Assessment ECA-110 Course: Peter Martin reported that the ECA-110 3-day course on consequence assessment is in its 3rd day of piloting at Los Alamos National Laboratory (LANL). It is well-received by the nine trainees with good interaction with the trainers (i.e., Carl Mazzola, John Ciolek, Steve Vigeant). Carl Mazzola thanked Dave Freshwater, Jim Fairbent, and Jim Powers for their comprehensive review of the training materials which improved the courseware. John Nasstrom indicated that he would be providing materials to include NARAC in ECA-110.



ANL BSL-3 Facility: Diane Rodi mentioned that the BSL-3 facility at Argonne National Laboratory (ANL) is scheduled to open on September 1, 2009.

IX. Next SCAPA Conference Call

The next SCAPA Conference call will take place on Thursday, **October 15, 2009**.

X. Adjournment

The teleconference was adjourned at **2:54 p.m. EST**. Carl thanked everyone for their time and contributions.

XI. SCAPA Program Action Item (AI) Status

Based on the information exchange from this teleconference, one AI was closed and no new AIs were opened, reducing the number of AIs to one. In addition, one Item of Interest was closed. The updated AI listing and Items of Interest listing is maintained separately but is usually sent out with teleconference highlights.

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.

Respectfully Submitted,

Carl Mazzola

SCAPA Executive Secretary