



## SCAPA Consequence Assessment Modeling Working Group (CAMWG)

### Highlights CAMWG Teleconference 10-02 August 26, 2010, 3:00 p.m. EDT

#### Participants

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Fernando Aluzzi, LLNL/NARC  
Denny Armstrong, WSMS  
Tom Bellinger, BWXT/Y-12  
John Ciolek, AlphaTRAC  
Dan Conners, Fluor-Hanford  
Wayne Davis, WSMS  
Dave Freshwater, NA-41  
Cliff Glantz, PNNL

Steve Homann, LLNL/NARAC  
Erik Kabelo, SRNL  
Steve Lockett, NA-41  
Carl Mazzola, Shaw Environmental  
Jeremy Rishel, PNNL (Chairman)  
Hoyt Walker, LLNL NARAC  
Michele Wolfgram, ORNL

#### Roll Call

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Jeremy Rishel conducted a roll call and acknowledged that 15 individuals interested in CAMWG activities were present. He called the teleconference to order and welcomed everyone to the second CAMWG teleconference of 2010.

#### Old Business

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##### *SCAPA SQA Guidance Document for Safety-Related and Non-Safety-Related Consequence Assessment (CA) Software (Activity Continuing)*

Cliff Glantz reported that the working draft of the SCAPA SQA document has been distributed to John Ciolek, the CAPARS custodian, and the six-member CAPARS review team. It is ready for posting on the SCAPA website.

Cliff indicated that working with the SCAPA SQA guidance document will be the best way to get constructive comments on it. Changes will be made to the draft as the on-the-job learning continues. Once the rate of changes slows, a "non-draft" version of the guidance document will be issued. In addition, once the draft SQA document is posted on-line, an e-mail will be sent to the SCAPA listserv with the URL for the document. A suggestion was made to include DMCC in this announcement. Cliff will bring this up at the next DMCC teleconference in September 2010.

Cliff stated that once a model is in the SCAPA SQA toolbox, the SQA requirements placed on the users of the models will be minimal. All the hard lifting on SQA will already have been done by

the model developers. Users will need to maintain configuration management, perform user training, and do some simple installation Verification & Validation

### ***Populating the SCAPA Toolbox (Activity Continuing)***

Several models have been identified as initial candidates for the SCAPA Consequence Assessment Modeling Toolbox, as follows:

- CAPARS
- NARAC modeling systems
- APGEMS
- RASCAL
- HYSPLIT
- RAMS/LPDM
- Puff-Plume

A second round of candidate models may include these:

- ARCON 96
- RSAC-7
- HPAC
- CHARM
- DUSTRAN

Jeremy mentioned that to be admitted to the SCAPA modeling toolbox, a model must be shown to meet, or be close to meeting, the SCAPA SQA guidance (i.e., model developers are working to close identified SQA gaps).

It was noted that APGEMS has gotten funding for its gap analysis, which will allow it to be reviewed in FY11. There is a need to get NARAC into the toolbox in a short period of time, so it will be reviewed after CAPARS. APGEMS will be the third model reviewed.

### ***CAPARS Gap Analysis (Activity Continuing)***

Jeremy stated that instead of working with all the candidate models at once, the CAMWG will start with CAPARS as a pilot model. The CAPARS review committee members are Michele Wolfgram, Carl Mazzola, Erik Kabel, Hoyt Walker, Cliff Glantz, and Jeremy Rishel.

Michele Wolfgram mentioned that ORNL is pushing the CAPARS SQA work to meet ORNL's SQA requirements. At ORNL, the project to evaluate current CAPARS SQA has a September 23, 2010 deadline.

John Ciolek indicated that computer systems have changed so much over the past 20 years since CAPARS code elements have been developed. For codes written and tested before current electronic storage capabilities existed, only hardcopy documentation is available. Because of data retention limits, some documentation has been permanently lost. The CAPARS group is bringing in 10 boxes of old SQA records from storage and are scanning what they can into PDF files. The challenge is how to maintain this information for future uses. To save critical data and allow people to access this content, the CAPARS team is setting up a SharePoint site to store their data and make it available. In doing this, they hope to set up a template that others can use.

Jeremy mentioned that SharePoint is in common use and seems to be a good mechanism to share documents. They have put together a structure document that describes the site. They will take the 10 elements in the SQA document (based on DOE O 414.1C) and organize the information into each of these 10 work elements. In developing this, it looks like things are working well as they gather their information and develop the SharePoint site. They decided not to put the data in the SharePoint web pages. They will provide a user interface in SharePoint to access the actual data. They are putting tags on each piece of data to allow SharePoint to display the information.

There is a desire to have all the information in one document, and they are not sure how this will be handled. John Ciolek is thinking about exporting CAPARS information to a SCAPA SharePoint. Right now, the CAPARS SharePoint is an internal site, but once completed, they will export it for external access. One option might be to give SCAPA reviewers access to the internal SharePoint site. Another option is to dump SharePoint material to an external site. They don't want to allow access to their bug control system and tracking, but they are enabling that in SharePoint.

The gap analysis is to be a separate document—an evaluation of where they are.

### ***NARACweb Access***

Fernando Aluzzi wasn't able to dig too deeply on the SNL issue of accessing NARACweb from Microsoft Internet Explorer. They have an FAQ on this; that Version 7 of IE is the earliest they support. They also provide earliest versions supported of other commonly used browser.

### ***HotSpot security privilege problems on Windows Vista / Windows 7***

Wayne Davis stated that there is a problem writing files to the Program Files directory. It has always been a recommendation, but now it is a requirement. WSMS is working with the HotSpot team to develop a work-around. They will include this on their problem reporting webpage and will have the problem fixed by October 2010. Wayne asked about problems with mixtures concerning putting in an alias. There is a problem when asking for table output for QA data because there was no record of where the mixture folder is placed. There is a work-around but not a final solution. The Hotspot team is also looking into solving this issue.

### ***Standardizing consequence assessment model input/output***

No work has been done in this area. An agency is looking into resolving differences in output. John Nasstrom and John Ciolek will discuss this further off-line.

### ***HotSpot Downloads***

Steve Homann shared that there are about 800 registered Hotspot users over the past five-month period. These include universities around the world, NASA, DOE, NNSA, and others. Questions are coming into the NARAC helpline involving installation at a rate of about two calls per week, and most inquiries involve the Vista/Windows 7 issue. They are waiting for an on-line help software update because it doesn't work on Vista and Windows 7. RoboHelp is the

software used to make the online help system for Hotspot. It was recommended that these noted issues should go onto the problem reporting webpage. Several people are using Hotspot for their DOE Documented Safety Analyses (DSAs). In addition, the 95% meteorology is being used by many of the user community.

## **New Business**

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### *Latest ALOHA Version in Toolbox*

Wayne Davis asked if there is any effort on getting the latest version of ALOHA, version 5.4.1.2, into the DOE Central Registry. Cliff Glantz reported on the work the DOE Safety Software Expert Working Group (SSEWG) is doing to try and make it easier to put updated versions of software into the Central Registry. There is a need, but things move slowly in the world of the Central Registry.

### *ALOHA Source Code*

John Ciolek shared that he has the source code for ALOHA (in C). He also noted that some security updates on Windows can cause problems with CAPARS mapping. This has been an ongoing problem. They are going to put the mapping programs into a virtual window, encapsulating the mapping code, to avoid this problem. It was noted that control system users have this same problem.

## **Round Robin**

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No discussion.

## **Adjournment**

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The next SCAPA CAMWG teleconference is scheduled for **October 19, 2010 at 3:00 p.m. EDT**. The date and agenda will be finalized and sent to the CAMWG listserv in advance of the next meeting.

The meeting was adjourned at **3:55 p.m. EDT**. Jeremy thanked everyone for their time and contributions.