

**SCAPA PROGRAM TELECONFERENCE 05-04**  
**THURSDAY, JUNE 21, 2005; 10:30 AM-11:30 AM**

**Participants:**

- Larry Campbell, Fluor Hanford
- Jeng Chang, NA-41
- Dorothy Cohen, ORISE
- Doug Craig, ATL International
- Wayne Davis, WSMS
- Leon Duquella, OROO
- Al Feldt, NA-41
- Jerry Giveault, INL
- Cliff Glantz, PNNL
- Jim Hardy, Consultant
- Jim Jamison, SAIC
- Mike Lazaro, ANL
- Po-Yung Lu, ORNL
- Amber Martin, WSMS Mid-America
- Carl Mazzola, Shaw Environmental
- Rocky Petrocchi, Washington Group
- Brad Salmonson, INL
- Peter Stang, NA-41
- Richard Thomas, Intercet Ltd.
- Gail Van Gorp, ANL
- Gustavo Vazquez, EH-412

**Teleconference Highlights**

**I. Roll Call**

Carl Mazzola conducted a roll call and acknowledged that 21 individuals involved in the SCAPA program were present. The teleconference was called to order and Carl thanked Dorothy Cohen for setting up the conference call.

**II. Administrative Matters**

Carl Mazzola led the discussion on various SCAPA administrative matters.

**SCAPA Meeting:** Carl Mazzola discussed the recent Annual SCAPA Meeting which took place on May 5, 2005 in New Orleans, LA. The one-day meeting featured 21 speakers and was attended by 46 professionals. Several members of the new biosafety working group, consisting of various DOE/NNSA Biosafety Officers (BSOs) also participated in a panel discussion. A brief memoriam for the late Doan Hansen was presented by Rocky Petrocchi. Carl and Cliff thanked Dorothy for the administrative support that she and her staff provided for the meeting.

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Carl mentioned that a meeting report has been prepared and the report and all of the power point presentations have been posted on the EMI SIG/SCAPA web site.

Next year's SCAPA Meeting will be one and one half days in duration and will be linked with the EMI SIG meeting and held on May 4-5, 2006. The likely venue will be San Antonio, TX, although Dallas, TX is still in the running.

**Previous Teleconference Highlights:** Carl Mazzola stated that the final minutes from the 3/24/05 SCAPA Program Teleconference 05-03 has been issued. He encouraged any additional comments to be provided to him by e-mail. Pending receipt of comments and their nature, the minutes may or may not be revised. Dorothy Cohen has posted the 3/24/05 SCAPA Program Teleconference 05-03 highlights on the EMI SIG/SCAPA website.

**SCAPA Action Item Status:** Carl Mazzola briefly discussed the updated SCAPA Program Action Item (AI) listing, dated May 16, 2005. Progress on closure continues since the last teleconference and SCAPA meeting. Several new AIs were opened up based on various meetings and discussions that took place during the EMI SIG and SCAPA meetings. At the time of this teleconference, 17 action items still remain open.

**TEEL Advisory Group (TAG) Status:** There was no discussion on TAG matters as this group has its own teleconferences. Tom Tuccinardi is responsible for reporting TAG decisions and discussions directly to Jim Fairobent. Tom was unable to participate in this teleconference.

**AI 04-55:** Cliff Glantz mentioned that a summer intern that could assist Doug Craig and Rocky Petrocchi in performing Software Quality Assurance (SQA) tasks on the TEEL and CMM software has been identified and is under the process of being contracted. The intern is a senior at Humboldt State University majoring in biochemistry with Visual Basic experience. He is expected to be available for a 6-8 week period beginning July 1, 2005. He initially will assist ATL International in a documentation task and then will work with Doug Craig and Rocky Petrocchi on SQA documentation. Doug was invited to the Tri-Cities to directly work with the intern later in July. **THIS AI CAN BE CLOSED.**

**AI 05-06:** Peter Stang inquired as to the status of the templates on SCAPA Position Paper and SCAPA Support that were provided to NA-41. AI Feldt mentioned that they are under review by Jim Fairobent and comments would be soon forthcoming. **ACTIVITY PROCEEDING.**

### **III. SCAPA Working Group Activities**

#### **Chemical Exposures Working Group (Doug Craig, Chairman)**

Doug Craig led the discussion and provided an update on the following Chemical Exposure Working Group action items.

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**AI 04-04:** Doug had earlier reported that he received 24 final and 60 interim Acute Exposure Guideline Limits (AEGs), which required a further update to the SCAPA hierarchy. The quality assurance of the update of the macros and the revised spreadsheet to include the interim and final AEGs into the hierarchy did have some unexpected issues. However, most of these issues have been resolved by Ray Lux and Doug is close to going into production on the next TEEL revision. Doug is proceeding with Revision 21 of the TEELs which will include all chemicals that have interim or final AEGs.

Larry Campbell asked whether any of the Revision 20 TEELs would be changed and Doug respond that a few of them probably would. There was a brief discussion on the disposition of LLNL's recent request for TEELs for 406 additional chemicals, but no indication whether they would become part of the Revision 21 update. **ACTIVITY PROCEEDING.**

**AI 04-22:** There was no additional discussion on the TEEL Methodology Paper review. It was noted earlier that completion of the "complete" TEEL-derivation Methodology paper was essential before any meaningful SQA could ever begin. **ACTIVITY PROCEEDING.**

**AI 04-53/05-03:** ATL's work on developing the TEEL derivation documentation and traceability of the macros, as part of the SQA effort will soon begin. Doug will be developing documentation and will be working with the PNNL summer intern. **ACTIVITY PROCEEDING.**

**Chemical Mixtures Working Group (Doug Craig, Chairman)**

Rocky Petrocchi led the discussion and provided an update on the following Chemical Mixtures Working Group action items.

**AI 04-23:** Rocky has developed about 10% of the HCNs for the approximately 300 new chemicals in the latest TEEL Revision 20. Further work is in process now that additional resources have been made available to him. **ACTIVITY PROCEEDING.**

**AI 04-44:** Rocky indicated that he has started the HCN methodology paper, which will be published in the *Journal of Applied Toxicology*. Much of its text will come from the HCN Development procedure. **ACTIVITY PROCEEDING.**

**AI 04-48:** Rocky mentioned that updating the older HCN 4.00 chemicals will be accomplished after HCN development of new chemicals in TEELs Revision 20 is completed. **ACTIVITY PROCEEDING.**

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**AI 05-02:** Rocky reported that the Developing and Using Chemical Protective Action Criteria (PAC) Workshop was successfully piloted during the EMI SIG meeting on May 2, 2005. The 90-minute pilot addressed regulatory requirements, developing and using AEGLs, ERPGs and TEELs, and analyzing chemical mixture impacts using the CMM and its automated workbook. Generally positive feedback was received from the 10 individuals that turned in the evaluation forms. Al Feldt indicated that Jim Fairbent is presently assessing whether the workshop should be expanded and provided to DOE/NNSA emergency management personnel in Washington DC, Germantown, MD, or at a DOE/NNSA site. Preliminary indications are that some form of an expanded workshop will be moving forward. **ACTIVITY PROCEEDING.**

**Consequence Assessment Modeling Working Group (Cliff Glantz, Chairman)**

Cliff Glantz led the discussion and provided an update on the following Consequence Assessment Modeling (CAM) Working Group action items.

**AI 03-08:** At an earlier conference call, LLNL NARAC had reported that they are working to create technical documentation for their system and will make these documents available to the NARAC user community and SCAPA as soon as they are available. An update on their progress and other NARAC news was briefly discussed at the NARAC User Group meeting at the EMI SIG meeting. **ACTIVITY PROCEEDING.**

**AI 04-39:** At earlier teleconferences there was discussion on the need to identify other issues that the CAM Working Group should address beyond the toolbox and the NARAC User's Advisory Group. The toolbox interface is a significant effort which is still dominating the work of the CAM Working Group. No additional discussion during this conference call. **ACTIVITY PROCEEDING.**

**AI 04-52:** Cliff mentioned that several candidate Emergency Preparedness Hazards Assessment (EPHA) and consequence assessment codes are being considered for the Toolbox by the SCAPA CAM Working Group once DOE O 414.1D and DOE G 414.1-1 are issued. A new draft of the order and guide was issued in April 2005 and the final order and guide should be issued later in June 2005 with very few substantive changes from the April 2005 version. The guides will be placed on the Central Registry's website to assist the DOE/NNSA sites in determining the appropriate level of SQA for codes used at the sites that affect safety. The DOE/EH-sponsored videoconference to kick off the SQA effort is now scheduled for late-July through early-August, 2005.

There still is a significant need to identify what level of quality assurance is needed for emergency response models (e.g., Level B or Level C models) that will satisfy the Central Toolbox Registry, and what criteria this graded approach would involve. The emergency management group at Hanford has made its own determination that Level B applies to some emergency planning and preparedness codes. **ACTIVITY PROCEEDING.**

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**AI 05-01:** There was considerable discussion on the hazard assessment of uranium hexafluoride ( $UF_6$ ) that was requested by Wayne Davis.  $UF_6$  hydrolyzes into  $UO_2F_2$  and hydrofluoric acid (HF) in the presence of atmospheric moisture, and these hydrolysis products tend to dominate human health impacts. There is still a need on developing guidance for the DOE/NNSA community on the appropriate atmospheric transport and dispersion models to use when attempting to accurately assess the impacts of a potential  $UF_6$  release. Central Registry toolbox models (e.g., ALOHA, EPICODE) do not explicitly consider the hydrolysis of  $UF_6$  and are likely to be inappropriate for assessing the phenomenology of a given release.

Jim Jamison has developed an excellent draft White Paper which has received review from several SCAPA sources. The White Paper indicated that the AEGL-2 for uranium hexafluoride represents the best toxic endpoint value. Wayne Davis, Amber Martin, and Michele Baker are involved in a comparison study of the HGSYSTEM- $UF_6$ , RASCAL, ALOHA, and EPICODE models to determine which transport and dispersion model is most appropriate to the solution of this problem. HGSYSTEM- $UF_6$ , and RASCAL have algorithms that account for uranium hexafluoride hydrolysis. Po-Yung Lu and Robert Gee have been involved in discussing the technical approach with the stakeholders and Po-Yung Lu and Richard Thomas have lent their toxicology expertise to address various questions that have arisen. The ultimate end product of this effort is to develop a SCAPA Position Paper that can advise the affected DOE/NNSA emergency management organizations on which approach is most technically sound and defensible. Mike Lazaro, Gus Vazquez, Rocky Petrocchi, and Richard Thomas requested to be copied on the next set of deliverables. **ACTIVITY PROCEEDING.**

Cliff encouraged everyone to submit an abstract to the upcoming American Nuclear Society (ANS) 9<sup>th</sup> Topical Meeting on Emergency Preparedness & Response that will be held in Salt Lake City, UT, February 12-15, 2006. The deadline for abstract submittal is July 1, 2005. The session of interest is Hazard Assessments and Consequence Assessment.

There was some additional discussion on which is the appropriate dose conversion factor (DCF) to use in EPHAs and consequence assessment models. Many sites use the ICRP-30 DCFs, some use the ICRP-68/72 DCFs, while others are considering using the upcoming ICRP-90 DCFs. Wayne Davis volunteered to develop a Statement of the Problem which will become part of a Position Paper if it is determined a SCAPA Position paper is merited. This problem statement will be submitted to either Cliff Glantz or Carl Mazzola for NA-41 consideration. **OPEN AI 05-07.**

**Biosafety Working Group (Cliff Glantz, Acting Chairman)**

Cliff Glantz led the discussion and provided an update on the following Biosafety Working Group action items.

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**AI 04-12:** Cliff noted that the Bioagents Working Group has been populated and members of this group had an excellent exchange at its initial meeting at the EMI SIG Meeting and also engaged in a panel discussion at the SCAPA Meeting relative to their interactions with the emergency management organizations and the Emergency Operations Center (EOC). Cliff indicated that he would be contacting the BSOs to discuss the next steps to be taken including developing a list of issues to be addressed by the working group. **THIS AI CAN BE CLOSED.**

**IV. SCAPA Web Page Report**

Cliff Glantz mentioned that photographs taken during the SCAPA meeting would soon be posted on the EMI SIG/SCAPA web page.

**V. EPA AEGLs/PAGs Status**

**AEGLs:** Po-Yung Lu briefly reported on EPA/AEGL activities.

Po-Yung indicated that there was a recent meeting of the National Advisory Committee (NAC) AEGL group in Washington, DC, and that the next National Academy of Sciences (NAS) meeting is scheduled for September. There are presently 24 final and 60 interim AEGLs.

**PAGs:** Gustavo Vazquez briefly reported on two initiatives regarding PAGs.

Gustavo mentioned that the PAGs for Improvised Nuclear Devices (INDs) and Radiological Dispersal Devices (RDDs) have been developed for the Department of Homeland Security (DHS) and are in the public comment cycle. They are expected to be released at the end of the summer.

The EPA PAGs have been drafted, but will not be released until the DHS IND/RDD PAGs have been released. The target for the release of the EPA PAGs is early fall.

**VI. AIHA ERPGs Status**

Richard Thomas briefly reported on the development of ERPGs.

Richard mentioned that the ERPG Committee had a meeting in Washington, DC, at FEMA/HQ, two weeks ago. The American Industrial Hygiene Association (AIHA) expects ERPGs of four new compounds to be published by the end of the year. The present AIHA focus is on high production materials. AIHA is also coordinating with EPA so that it doesn't duplicate work in each others programs. Thus, if EPA is developing an AEGL for a new chemical, AIHA will not consider that chemical as a candidate for a new ERPG. The next ERPG Committee meeting will be in September 2005 at Nantucket, MA.

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**VII. New Business**

Carl Mazzola asked if there were any new business items to be discussed and none were raised.

**VIII. Next SCAPA Conference Call**

Carl Mazzola tentatively scheduled the next SCAPA Conference call for **July 28, 2005 at 10:30 a.m.**

**IX. Adjournment**

The teleconference was adjourned at **11:30 a.m.**

**X. SCAPA Program Action Item Status**

Based on the information exchange from this teleconference, Action Items **04-12**, and **04-55** will be closed. A new Action Item, **05-07**, "Determine Applicable Dose Conversion Factor", resulted from this Teleconference.

Carl Mazzola will update the action item list based on the information exchange from this conference call. The number of open action items has been reduced to 16.

Respectfully Submitted,

*Carl Mazzola*

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