Participants: Doug Craig, ATL International

Dorothy Cohen, ORISE Diana De La Rosa, SNL Cliff Glantz, PNNL Gail Van Gorp Jim Jamison, SAIC Po-Yung Lu, ORNL

Amber Martin, WSMS Mid-America Carl Mazzola, Shaw Environmental

Bill Peterman

Rocky Petrocchi, WGI Peter Stang, NA-41 Richard Thomas Gus Vazquez, EH-412

Teleconference Highlights

I. Roll Call

Carl Mazzola acknowledged that 14 individuals involved in the SCAPA program were present and the teleconference was called to order. Carl thanked Dorothy Cohen for again setting up the conference call.

Cliff Glantz informed everyone of the sad news of the untimely passing of Doan Hansen at his home in Miller Place, NY on March 12, 2005. Doan had been a leader in the SCAPA program for more than a decade and he will be sorely missed by everyone. A brief memorial for Doan will be presented at the May 5, 2005 SCAPA Meeting.

II. Administrative Matters

Carl Mazzola led the discussion on various SCAPA administrative matters.

Previous Teleconference Highlights: Carl Mazzola stated that the final minutes from the 2/24/05 SCAPA Program Teleconference 05-02 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 will post the 2/24/05 SCAPA Program Teleconference 05-02 highlights on the EMI SIG/SCAPA website.

SCAPA Action Item Status: Carl Mazzola briefly discussed the updated SCAPA Program Action Item (AI) listing, dated March 11, 2005. Progress on closure continues since the last teleconference. At the time of this teleconference, 18 action items still remained open.

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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. Doug Craig indicated that TAG did make a decision on the usage of footnotes regarding TEELs with the Lower Explosive Levels (LELs) (see AI 04-41).

AI 04-02: Carl Mazzola has provided a draft of the SCAPA program volunteer support letter to AI Feldt and Jim Fairobent. **THIS ACTION ITEM WILL BE CLOSED**.

AI 04-55: Cliff Glantz mentioned that he had earlier met with PNNL education managers to identify a summer intern that could assist Doug Craig and Rocky Petrocchi in performing Software Quality Assurance (SQA) tasks on the TEEL and CMM software. The target is to have the intern aboard in the June 2005 timeframe, but the implementation of this decision is still awaiting funding prioritization. Doug Craig noted that the initiation of SQA tasks cannot begin until all TEEL documentation is available. **ACTIVITY PROCEEDING**.

III. SCAPA Working Group Activities

Chemical Exposures (Doug Craig, Chairman)

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

Al 04-04: Doug had earlier reported that he received 24 final and 60 interim Acute Exposure Guideline Limits (AEGLs), which further increased the work needed in updating the macros to include them in the hierarchy. The quality assurance of the update of the macros and the revised spreadsheet to include the interim and final AEGLs into the hierarchy had also run into some unexpected issues. Within the limitations of the macro update issues, Doug is proceeding with Revision 21 of the TEELs which will include all chemicals that have interim or final AEGLs. Due to the amount of work left in the macro revision and any software quality assurance (SQA) efforts, the new TEELs cannot be completed prior to the May 5, 2005 SCAPA meeting.

LANL has recently provided a list of 400 additional new chemicals which it would like TEELs developed for by the end of May, 2005. Doug felt that this is too ambitious a schedule to be met. Jim Fairobent requested that the LANL chemicals be included within the Revision 21 TEEL development effort, which is likely not achievable. **ACTIVITY PROCEEDING**.

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

Al 04-41: At an earlier teleconference, Doug Craig provided an update on the TEEL-3/ Lower Explosive Limit (LEL) comparison. Doug's preference is to flag TEELs that were 50% and 90% of the LEL value as footnotes, which is the procedure used by EPA for AEGLs. The TAG has met on this matter and determined that the flagging proposal should be implemented. **THIS ACTION ITEM WILL BE CLOSED**.

AI 04-53: At an earlier teleconference, Doug mentioned that there was a hold on the work on developing the TEEL derivation documentation, as this task and others were under a program prioritization review. This effort will develop adequate documentation and traceability of the macros. **ACTIVITY PROCEDING**.

Chemical Mixtures (Doug Craig, Chairman)

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

Al O4-05/Al O4-57: Rocky Petrocchi reported that the Developing and Using Chemical Protective Action Criteria Workshop is moving forward. The workshop will address regulatory requirements, developing and using AEGLs, ERPGs and TEELs, and analyzing chemical mixture impacts using the Chemical Mixture Methodology (CMM) and its automated workbook. This 90-minute pilot has been scheduled from 3:00 PM – 4:30 PM; May 2, 2005 at the EMI SIG meeting. Carl Mazzola inquired whether there is a sign-up for the pilot to ensure that EMI SIG attendees are aware of the training opportunity and that they can provide valuable feedback to the pilot. Cliff Glantz, Carl Mazzola and Rocky Petrocchi will develop a one-page announcement to be posted on the EMI SIG web page.

After the pilot, Jim Fairobent will assess whether the workshop should be expanded and provided to DOE/NNSA emergency management personnel. Feedback from the pilot attendees will provide valuable input. **ACTIVITY PROCEEDING. AI 04-57 INTEGRATED INTO AI 04-05**.

AI 04-23: Rocky Petrocchi has developed some of the HCNs for the approximately 300 new chemicals in the latest TEEL Revision 20. However, the funding for this effort is still in suspense due to a contract hold with ATL International. **ACTIVITY PROCEEDING**.

AI 04-44: At an earlier teleconference, Rocky Petrocchi 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. This task continues to be on hold pending program prioritization review. **ACTIVITY PROCEEDING**.

AI 04-48: During earlier teleconferences, Rocky Petrocchi indicated that Doug Craig and he will be placing a note in the Excel spreadsheet regarding the revision of the older HCN 4.00 chemicals. The note will state that the results for HCN 4.00 (i.e., general acute health effects) may be overconservative. The note was added to the file, which is now available on the SCAPA website. Updating the older HCN 4.00 chemicals will be accomplished after HCN development of new chemicals in TEELs Revision 20 is completed. **ACTIVITY PROCEEDING**.

Consequence Assessment Modeling (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: LLNL NARAC has reported that they are working to create technical documentation for their system and will make these documents available to the NARAC user community (including SCAPA) as soon as they are available. An update on their progress and other NARAC news will be provided at the SCAPA meeting. Amber Martin requested copies of the NARAC technical documentation when it becomes available. 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. **ACTIVITY PROCEEDING**.

Al O4-52: At earlier teleconferences, Cliff Glantz 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 414.1C and DOE G 414.1-1 are issued. A new draft of the order and guide was issued in February 2005 and are under review by a Subcommittee to the CAM WG (i.e., Cliff Glantz, Wayne Davis, Larry Campbell, Carl Mazzola). Currently, DOE/EH is still waiting for the NNSA to provide their concurrence with DOE O 414.1C and for the DNFSB to notify DOE that there are no further comments on the Order. Once the final order and guide are issued, they 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.

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**.

Al 05-01: At earlier teleconferences there was considerable discussion on the hazard assessment of uranium hexafluoride (UF₆) that was requested by Wayne Davis. UF₆ hydrolyzes into UO_2F_2 and hydrofluoric acid (HF) in the presence of atmospheric moisture, and these hydrolysis products tend to dominant the human health impacts. The ERPGs and AEGLs for UF₆ take the hydrolysis reaction products into account; however, this approach may be akin to "comparing apples to oranges" and may lead to overconservatism or underconservatism under different circumstances.

The focus of the UF₆ discussion during the current teleconference was on developing guidance for the DOE community on the appropriate atmospheric transport and dispersion models to use when attempting to accurately assess the impacts of a potential UF₆ release. Central Registry toolbox models (e.g., ALOHA, EPICODE) do not explicitly consider the hydrolysis of UF₆ and are likely to be inappropriate for assessing the phenomenology of a given release. Carl Mazzola had mentioned that there were at least 3 models that explicitly address the hydrolysis reaction: (1) TRIAD; (2) RASCAL; and, (3) HGSYSTEM-UF₆. Amber Martin indicated that these were not in the Central Registry Toolbox and that DOE-Portsmouth was directing them to use a toolbox model, such as ALOHA which does not have technical modules to address the hydrolysis reaction. Wayne Davis has begun a comparison study of the HGSYSTEM-UF₆ and RASCAL models. Carl Mazzola will call Wayne with information on how to obtain the TRIAD model to extend this evaluation. A special conference call relative to this activity will be scheduled.

There was also discussion on funding Wayne's efforts. Carl Mazzola asked Amber Martin to check with DOE Portsmouth on providing some or all of the funding since that office had requested the original analysis. **ACTIVITY PROCEEDING**.

Biosafety (Cliff Glantz, Acting Chairman)

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

AI 04-12: Cliff noted that there has been more progress relative to the recruitment of individuals to populate the Bioagents Working Group. Members of this group will be at the EMI SIG Meeting and will engage in a panel discussion at the SCAPA Meeting relative to their interactions with the emergency management organizations and the Emergency Operations Center (EOC). Roger Mitchell (PNNL) has accepted the invitation and several other Biosafety Officers (BSOs) have been contacted. **ACTIVITY PROCEEDING**.

Al 04-14: At earlier teleconferences, it was noted that Jim Powers (NA-41) met with the CDC in late-November to discuss its biosafety levels and how they can be used in the DOE Biosafety community.

Peter Stang indicated that an EH supplemental order relative to compliance with 10 CFR 851 (i.e., DOE O 473-xx) has been issued for comment on worker safety and health. This order has a section on biosafety and is a restricted document. Peter mentioned that he would forward a copy of the supplemental order within classification constraints.

The Universal Resource Locator for the Supplemental Notice of Proposed Rulemaking, 10 CFR 851, Worker Safety and Health Program is http://www.eh.doe.gov/rulemaking/851/ ACTIVITY PROCEEDING.

IV. SCAPA Web Page Report

Cliff Glantz has provided various updates to Dorothy Cohen to post on the SCAPA web page over the past month. These updates have been promptly implemented by the Dorothy's team at ORAU. Additional updates will be provided to Dorothy in the coming month. This will include an update to the SCAPA meeting announcement, a correction to the directions to the EMI SIG/SCAPA meeting hotel, and a memorial webpage for the late Doan Hansen.

V. EMI SIG/SCAPA May 2005 Meeting Planning

Cliff Glantz and Carl Mazzola led the discussion and provided an update on the EMI SIG/SCAPA meeting planning.

AI 04-56: The SCAPA agenda is essentially complete and has been posted on the web page. Jim Jamison and Greg Martin are looking to establish a topic for their talk. Cliff Glantz will contact Bettina Stopford to confirm her talk. Cliff Glantz and Carl Mazzola will be developing a memorial for the late Doan Hansen which will be presented at the beginning of the meeting. Carl Mazzola encouraged all individuals to plan on participating in the SCAPA meeting. **ACTIVITY PROCEEDING**.

Cliff Glantz mentioned that there will be a NARAC DOE User's Group meeting on Monday, May 2, 2005 from 4:30 PM to 6:00 PM.

VI. EPA AEGLs/PAGs Status

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

There will be a meeting of the National Advisory Committee (NAC) AEGL group at Research Triangle Park, NC in April. The National Academy of Sciences (NAS) has a new chairman, Ben Gardner. The goal of the program is to produce at least 20 new AEGLs each year.

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

PAGs for Improvised Nuclear Devices (INDs) and Radiological Dispersal Devices (RDDs) have been developed for the Department of Homeland Security (DHS) and are under a 120-day review at the Office of Management and Budget (OMB). A Federal Register (FR) notice has been issued.

The EPA PAGs are still not ready for review, but will be consistent and coordinated through the FR.

VII. AIHA ERPGs Status

Richard Thomas briefly reported on the development of ERPGs.

The ERPG Committee had a meeting in Park City, UT and a new handbook with 115 ERPGs has just been made available. The handbook has been posted on the AIHA web site and can be ordered over the Internet. The web page also contains a tribute and memoriam to Doan Hansen.

VIII. New Business

Carl Mazzola conducted a round robin and there were no new business items.

IX. Next SCAPA Conference Call

Carl Mazzola tentatively scheduled the next SCAPA Conference call for **June 21**, **2005 at 10:30 a.m**.

X. Adjournment

The teleconference was adjourned at 11:30 A.M.

SCAPA PROGRAM TELECONFERENCE 05-03

THURSDAY, MARCH 24, 2005; 10:30 AM-11:30 AM

XI. SCAPA Program Action Item Status

Based on the information exchange from this teleconference Action Items **04-02**, **04-41**, **and 04-57** will be closed. There were no new Action Items resulting from this Teleconference.

Carl Mazzola will update the action items list based on this conference call. The number of action items has been reduced to 15.