



Subcommittee on Consequence Assessment
and Protective Actions (SCAPA)
Chemical Effects Working Group (CEWG)
Chemical Mixtures Working Group (CMWG)

Highlights

Meeting of the CEWG and CMWG

Tuesday, May 5, 2009; 11:30 a.m. Pacific Daylight Time

Participants:

Maureen Alai, LLNL NARAC
Jayne-Anne Bond, ATL International
Doug Craig, ATL International
John Ciolek, Alpha-TRAC
Dave Freshwater, NA-41
Gerry Gibeault, INL
Cliff Glantz, PNNL
Eva Hickey, PNNL
Steve Homann, LLNL NARAC
Jim Jamison, SAIC

Eva Hickey, PNNL
Erik Kabela, SRNL
Po-Yung Lu, ORNL
Greg Martin, SAIC
Carl Mazzola, Shaw Environmental
Mister McDonnell, NS Tec
Rocky Petrocchi, URS
Jim Powers, NA-41
Richard Thomas, Intercet
Tom Tuccinardi, ATL International

I. Roll Call

Cliff Glantz conducted a roll call and acknowledged that 20 individuals were present.

II. Discussion

Doug Craig led a CEWG discussion that included the following four topics:

1. **PAC/TEEL Revision 25:** The latest PAC/TEEL revision is being finalized and should be published by the end of June 2009.
2. **Concentration Limit Upgrade Project:** A project has been initiated to upgrade all of the PAC/TEELs based on concentration limits with more recent information that is available in the literature and recent studies. Po-Yung Lu and a student have identified 2,298 chemicals with PAC/TEELs based on concentration limits, and approximately 1,500 chemicals will require changes. This is a time-consuming process, and 400 have been looked at in detail so far. The plan to revise the chemicals that need to have their PAC/TEELs updated should be ready by mid-June 2009.
3. **PAC/TEEL Revision 24 Biotoxins:** The present PAC/TEELs have 10 biotoxins that are treated as organic chemicals and are based on RTECS.
4. **Use of Health Hazard Effects in Screening:** Gerry Gibeault inquired why the SAX Health Hazard Ratings (HHRs) are not identical to the HMIS system. Ken Young indicated he tried to correlate the TEEL values to HHR classes 2-3, but was unsuccessful. Doug mentioned that this is because SAX takes into account more than health effects in its rating system. Ken mentioned LLNL has thousands of chemicals without HHRs and is still looking for a consistent pointer for screening. Doug recommended using the PAC/TEELs.



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Rocky Petrocchi led a CMWG discussion that included the following five topics:

1. **HCN Catch-up Project:** All of the almost 1,000 Revision 20-24 HCNs have been developed with the help of Jayne-Anne Bond, Xiao-Ying Yu, and Donna Trott. A new student who will work this summer and fall will soon be brought on to assist with HCN projects. The SharePoint software is working well in coordinating the HCN development efforts, and Rocky has developed a “roadmap” to maximize efficiency in the process.
2. **HCN Revision 25:** Rocky indicated that the HCNs are complete for all PAC/TEEL Revision 25 chemicals and will be part of the PAC/TEEL package when it is released at the end of June 2009.
3. **Older HCN Update Project:** 2,300 chemicals with older HCNs will be updated with new information and data. Online sources of new data include the National Toxicology Program, Centers for Disease Control (CDC) and the Aberdeen Proving Ground. Carl Mazzola made everyone aware of the recent online EPA Aggregated Computational Technology Resource (ACToR) database (www.actor.epa.gov/actor), which has toxicity information on more than 500,000 chemicals.
4. **Use of CMM at DOE/NNSA Sites:** Jim Jamison, John Ciolek, and Gerry Gibeault mentioned they all successfully use the CMM in their work.
5. **Acute vs. Chronic HCNs:** Jim Jamison asked why chronic HCNs are being used when PAC/TEELs are associated with acute effects. Since the emergency event environment is primarily interested in acute effects, using chronic health indicators appears inconsistent. Rocky responded that the HCN apportioning of impact has an overall minor effect. Richard Thomas offered that the Department of Defense has developed a ranking based on what body function is being degraded (e.g., central nervous system). Doug Craig suggested that the chronic effects can be de-emphasized by giving them fractional weighting.

III. Next SCAPA CEWG/CMWG Meeting

Cliff Glantz indicated that next SCAPA CEWG/CMWG teleconference has not yet been scheduled. The next SCAPA CEWG/CMWG meeting is scheduled for **Tuesday, May 4, 2010** during the next EMI-SIG meeting in an east coast city.

IV. Adjournment

The meeting was adjourned at **1:00 p.m. PDT**. Doug and Rocky thanked everyone for their time and their contributions.