



Highlights
HASC Teleconference 11-01
Wednesday, February 16, 2011; 2:00 p.m. EST

Participants

Maureen Alai, LLNL NARAC	Mike O'Keefe, NSTec/NTS
Bud Bucci, Hanford	Kelly Parker, AlphaTRAC
Dorothy Cohen, ORISE	Shana Peterson, Y-12
Wayne Davis, URS SMS SRS	Bill Possidente, NSTec/NTS
Dave Freshwater, NA-41	Jim Powers, NA-41
Jim Jamison, SAIC	Bill Purtymun, LANL
Aprill Jivelekas, Ascendent Engineering Hanford	Chuck Rives, Pantex
Vicki Locklair, NA-43	Greg Roddahl, Pantex
Steve Lockett, NA-41	Jonathan Tapia, LANL
Dave McGrath, SNL	Michele Wolfgram, ORNL

Roll Call and Welcome

Ken Young was unavailable for the call. Michele Wolfgram conducted a roll call, acknowledged that 20 participants were present, and called the teleconference to order.

Old Business

AI 09-01 – Diluted gas mixtures screening effects (Continuing activity)

A draft Frequently Asked Questions (FAQ) regarding diluted gas mixtures screening effects was reviewed by Jim Powers, and Wayne Davis has revised the paper accordingly. After a final review of the comment incorporation, the paper will be finished and posted within a week or two.

AI 10-01 – Determining dispersible amounts using vapor pressures (Continuing activity)

Chuck Rives developed an EPA screening technique spreadsheet for potential liquid hazards using vapor pressure criteria. Chuck drafted a position paper to describe the purpose and results of this analysis and has received reviewer comments. He is in the process of incorporating those comments while ensuring that the paper is not misinterpreted as suggesting policy decisions of any kind. Once completed, Chuck will post for the group to review, and the goal is to have the final product ready for the Annual Meeting in May.

AI 10-02 Fire-Propagated Plume Modeling (Continuing activity)

Ken Young has been looking into modeling fire phenomenology that has many hard-to-define variables and is working with Steve Homann of NARAC. Ken was not available for the call, but provided an update before the meeting. He has plans to meet with Steve by early March, and the project will progress from there. Chuck stated that he had also spoken with Ken about possibly having a panel discussion on this topic at the Annual Meeting in May.

New Business

Michele Wolfram passed on information provided by Ken Young regarding a meeting with the Defense Nuclear Facilities Safety Board (DNFSB). He mentioned that they are looking at differences in variables between the Safety Basis and Emergency Planning documents, specifically the values for the deposition velocity of tritiated water. He emphasized that if there is a legitimate technical basis for the values, that should be enough justification to support their use.

Mike O'Keefe discussed instances when chemicals are run using a Gaussian plume model, and the distance to Protective Action Criteria (PAC) is exceeded at great distances. He wanted to know what other people are doing to mitigate this situation and if he should be using a more realistic model or factoring plume arrival time into the results. Mike stated that he knew of some locations that simply reported the distance to PAC as greater than 20 km (or similar value), but he wasn't sure if there was any documentation to support that. Chuck Rives mentioned that they had instances where the results gave large distances to PAC, and he argued that results out to those distances are beyond the design parameters of the code, and the model is not necessarily reliable as a result. He suggested that it might be appropriate to limit the reported distance to PAC to the maximum Emergency Planning Zone (EPZ) distances based on the factors used to establish the EPZ. Wayne Davis inquired about the chemical of concern and stated that it might have properties that could affect the parameters in the model (e.g., deposition velocity), which might lower the distance to PAC. Overall, the discussion leaned toward limiting the reported number and justifying that decision based on the fact that there would be enough time to run models at the time of the release to determine more accurately the results and it would be more appropriate to wait for model results for the actual event because by the time it reaches receptors at that great of distances, a number of factors could be very different, such as meteorology.

Mike O'Keefe also brought up a discussion about analyzing inadvertent criticality accidents. He was inquiring about when people were analyzing criticality events and, depending on the decision, what the approach should be if there is a conflict with the Safety Basis documents (e.g., if using ANSI standards to determine when to analyze). His question mainly stemmed from a readiness review that was conducted for a facility in which a criticality accident was analyzed, and the reviewers were insisting that ANSI standards for emergency preparedness and response were followed as a result, even though the facility did not require a Criticality Accident Alarm System (CAAS). Michele Wolfram discussed that ORNL only includes criticality accidents if they are included in the Accident Analysis section of the Safety Analysis Report, but that the same type of issued had been raised during an internal independent oversight review. Michele said that she had written a white paper discussing that because there was no CAAS, facility personnel responding to a criticality accident would have no way of distinguishing between it and any other radiological release. Because the facility already conducts drills to respond to radiological releases, no further emergency planning is necessary. Michele agreed to send Mike a copy of her paper. Wayne also agreed with Michele and stated that SRS had similar situations where they would not be able to determine if a criticality had occurred (e.g., buried waste site) and decided that the response would not be any different, so nothing further was required.

Mike O'Keefe also inquired about how people were handling determining/implementing emergency worker dose limits and if anything needed to be built into the protective actions to address the



Hazards Assessment Subcommittee (HASC)

limits. Mike stated that there are multiple sources for the dose information that have different values (EPA 400, DHS guidelines for RDD & IND). Michele Wolfgram stated that ORNL had addressed that issue recently and included the information in the Incident Commander's checklist. Michele agreed to send Mike the checklist and any information on the source materials used to develop the checklist.

Dorothy Cohen mentioned that emails had been sent out notifying people whose presentations were accepted for the EMI SIG Annual Meeting. Emails will be sent out soon regarding presentations for subcommittees. The hotel reservations can be made from the website, and they are hoping to have registration for the meeting available before the end of the week.

Round Robin

Site	Representative	Discussion
ANL	None	No report.
BNL	None	No report
EOTA	None	No report.
Hanford	Jivelekas	Updating Continuity Of Operations Program (COOP) Plan, Hazards Surveys, and EPHAs
	Bucci (MSA)	Updating Hazards Survey
INL	None	No report
LANL	Tapia	Revising Hazards Surveys and EPHAs
LBNL	None	No report
LLNL	None	No report
NTS	O'Keefe	Finalizing Initial Response Guide and revising procedures, checklists, and training to incorporate; preparing for a new Nuclear Facility and an upcoming exercise
ORNL	Wolfgram	Revising EALs; preparing for Full Participation Exercise
Pantex	Rives	Responding to EPHA comments; starting work on Hazards Survey for California site
SNL	McGrath	Updating EPHAs.
SRS	Davis	Hazards Survey and EPHA revisions; toured MOX facility and discussed interface
Y-12	Peterson	Updating Hazards Surveys, EPHAs, and EALs; completed onsite transportation accident Full Scale Exercise; updating site Emergency Plan; making revisions for buildings being demolished



Adjournment

The teleconference was adjourned at 2:41 pm EST, and Michele thanked everyone for participating. Mike O'Keefe also thanked everyone for their input on his questions. The next HASC teleconference is scheduled for **Wednesday, April 20, 2011, 2:00 pm EDT.**

HASC Action Item Status

No new AIs were opened, and no AIs were closed, leaving three open AIs.