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AI No.	Description	Discussion	Resources	Status
03-08	NARAC Technical Basis Documents to Support CA Modeling	LLNL NARAC has evolved over the last 30 years and has generated technical documents useful to DOE/NNSA modeling community.	Cliff Glantz Carl Mazzola John Nasstrom	Publication of NARAC technical documents pending. NARAC web page does have some links that are useful.
04-23	HCN Development for Revision 20/21 TEELs.	HCNs for new chemicals in TEELs Revisions 20 and 21 need preparation using new acute HCNs in HCN priority list.	Rocky Petrocchi Doug Craig	TEELs Revision 20 HCN effort is 55% complete.
04-39	Firm up CA Issues for CAMWG	CAMWG is tasked with developing a CA toolbox and identifying additional tasks.	Cliff Glantz Carl Mazzola John Nasstrom	SCAPA toolbox and NARAC User Group issues discussed at the 5/2/06 CAMWG meeting and EMI SIG Session on SQA.
04-44	Technical Paper on HCN Methodology	The development of a conjugate paper to chemical mixture methodology to address HCN methodology would be useful.	Tom Tuccinardi Rocky Petrocchi Doug Craig	Submission to *Journal of Applied Toxicology* for publication. Draft for SCAPA review by August 2006.
04-53	EMI-SIG Session: Effect of SQA Guidance on TEEL and CMM Software	At 11/17/04 SCAPA Program Meeting, the CEWG was directed to develop a paper or plenary session for the EMI SIG meeting that addresses the effect of the new SQA guidance on TEELs and the CMM.	Doug Craig Rocky Petrocchi Po-Yung Lu Cliff Glantz Jim Jamison	Session delayed until 2007 EMI SIG meeting in San Antonio, TX. Details to emerge after TEEL SQA effort and updated TEEL methodology documentation are completed.
05-03	SQA Plan for TEEL and CMM Software	At 5/3/05 SCAPA Program Review Meeting, NA-41 directed Chemical Exposures/Chemical Mixtures Working Group to begin developing an SQA Plan for the TEEL and CMM software.	Doug Craig Rocky Petrocchi Jim Weeks Cliff Glantz	PNNL summer intern report concluded code executing properly. Software custodian, a procedure for updating and other SQA documentation are still outstanding.
05-05	NARAC Ingestion of ARCON96	NARAC should ingest ARCON96 to provide capability of calculating radiological and chemical impacts as close as 10 meters from the release point.	Brenda Pobanz John Nasstrom Cliff Glantz Carl Mazzola	NARAC has received information on ARCON96 and is moving forward in conjunction with another project.
05-07	Uniform Dose Conversion Factors (DCFs)	At 6/21/05 SCAPA teleconference ICRP-30, ICRP-68/72, and ICRP-90 DCFs applicability to EPHAs & CA models was undertaken.	Cliff Glantz Wayne Davis	Strong DOE/NNSA-wide interest. EPA-400 plans to keep ICRP 30 values. SRS moving to ICRP 68/72. EH-52 concurrence received.
05-09	TEEL Documentation and Database	At 7/28/05 SCAPA Conference call, Tony Pierpoint discussed the progress of the TEEL Documentation and Database project.	Jim Weeks Ernie Harr Doug Craig Rocky Petrocchi	Draft TEEL Documentation and Database document, inclusive of TEEL derivation methodology, received 1,553 SCAPA comments. Publication targeted for end of July 2006.
05-10	TEELs Revision 22 Development	At 9/7/05 SCAPA Teleconference, planning for TEELs Revision 22 commenced.	Doug Craig Rocky Petrocchi	189 of 358 new chemicals completed. Pre-QA Revision 22 TEELs targeted for August 2006.

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06-01	Central Registry SQA and Toolbox Implementation	At 11/16/05 SCAPA Program Review Meeting, NA-41 directed Consequence Assessment Modeling Working Group to have DOE/NNSA sites do an SQA self-assessment and develop list of candidate models to be submitted to the Central Registry for inclusion in the toolbox, and contact the Central Registry to discuss its plans for implementing DOE O 414.1D and DOE G 414.1-1.	Cliff Glantz Carl Mazzola Larry Campbell Wayne Davis John Nasstrom	Fluor-Hanford has determined Level B is applicable to EP & R codes based on DOE HDBK-3009 language, as presented by Larry Campbell at 5/3/06 EMI SIG session on SQA. Cliff Glantz presented the SCAPA Toolbox concept at an EMI SIG session on 5/3/06. HOTSPOT, NARAC, ARCON96, 2DPUF, APGEMS, CAP88PC, and RASCAL are SCAPA Toolbox candidates. The SCAPA Toolbox will require a graded level of SQA. SCAPA web page updated to include an SQA web page and links. Moving forward with HOTSPOT as a candidate 8th toolbox model.
06-02	NARAC Code Application for EPHAs	At 11/16/05 SCAPA Program Meeting, NA-41 directed SCAPA to determine effect of using NARAC for EPHAs and to quantify possible non-conservatisms. NARAC may be requested to provide additional documentation and training to its users.	Cliff Glantz Carl Mazzola Brenda Pobanz	NARAC representatives acknowledged that for stable low wind speed conditions, NARAC gives more accurate, **but less conservative,** X/Q values and therefore should not be used for EPHAs. NARAC *iClient* documentation makes this disclaimer. DOE/NNSA sites will be encouraged to not use NARAC for EPHA preparation through a NA-41 memorandum.
06-05	Source Term Working Group	At 2/22/06 SCAPA Teleconference it was decided to reconstitute the Source Term Working Group (STWG), which last met in 1997.	Larry Campbell Wayne Davis Robert Gee Cliff Glantz Carl Mazzola Jim Jamison	STWG meeting took place on 5/3/06 at the EMI SIG Meeting. The WG meeting was productive and several source-term related issues will be addressed. The working group is being populated.

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06-06	Transport and Dispersion of Biological Agents/Toxins for BioEMG	In a 3/29/06 e-mail, NA-41 directed SCAPA to address the following issue: "The transport and dispersion of biological agents/toxins released from DOE/NNSA biosafety facilities was left an open subject in the BioEMG. What models are available and appropriate for predictions, especially for lab size source terms, and NOT production quantities? What are the limits to the use of Gaussian models? What other modeling tools are available or being developed? Because a level of severity will likely not be available for defining a Protective Action Criterion (PAC), how will modeling results best be used?"	Cliff Glantz Dina Sassone Frank Roberto Carl Mazzola Jim Powers	This issue was discussed in the 4/16/06 BWG Teleconference and the May 2, 2006 BWG meeting. NA-41 has stated the importance of this task to fill a gap in the Biosafety EMG, and work will begin shortly.
06-07	Use of mixture methodology results in emergency planning	In a 3/30/06 e-mail, NA-41 directed SCAPA to address the following issue: The mixture methodology is being applied to source terms involving the release of dissimilar materials from separate and multiple containers. The basic assumption, in order to apply the mixture methodology, is that the materials are released simultaneously, and a plume is formed that represents a mixture of the materials. This is a very conservative assumption, but may be the only one that will yield consequence estimates. It is very important that the limits on the application of this methodology be addressed; assuming, of course, that any exist. Also, in a practical sense, how should the results of the mixture methodology best be used in emergency planning?"	Rocky Petrocchi Doug Craig Reed Hodgin Cliff Glantz Carl Mazzola	Doug and Rocky have provided a response which is under NA-41 review.
06-08	Develop Biosafety WG Charter	At the 4/16/06 BWG teleconference, the need for a charter was discussed.	Cliff Glantz Carl Mazzola Dina Sassone Frank Roberto	A draft charter has been developed and is under review.

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06-09	Standardization of Hazard Ratings	At the 5/2/06 CEWG/CMWG meeting, the need for the development of a standard hazards rating index was discussed and a small work group established to address the issue.	Rocky Petrocchi Wayne Davis Cliff Glantz Po-Yung Lu Richard Thomas Mike O'Keeffe Gary Winner Doug Craig (advisory)	Rocky Petrocchi has compared NFPA 704 with Sax and has determined significant differences.
06-10	Use of CMM by safety analysts	At the 5/2/06 CEWG/CMWG meeting, there was discussion that Safety Analysis (SA) is not using the CMM in their Documented Safety Analyses (DSAs) which is non-conservative. This will cause a significant disconnect with Emergency Planning (EP) as EP begins to implement the CMM and finds chemical mixture release scenarios with significant consequences whereas SA will not.	Doug Craig Rocky Petrocchi Wayne Davis Cliff Glantz Jim Morgan Carl Mazzola	SCAPA to work with Energy Facility Contractor Group (EFCOG) Chemical Safety Topical Committee (CSTC) to close this gap. Carl Mazzola has discussed with Dick Englehart, DOE/EH-31. Rocky Petrocchi and Jim Fairobent to follow-up.
06-11	Benchmarking Consequence Assessment Team (CAT)	At the 5/2/06 CAMWG meeting, the WG was asked to assist SNL in benchmarking its CAT.	Cliff Glantz Carl Mazzola Marie Dunkle Diana de la Rosa Larry Campbell	Marie Dunkle has been asked to provide benchmarking program information that she presented several years ago at an EMI SIG meeting. Diana de la Rosa has developed questionnaire, which could be used to supplement benchmarking work.
06-12	Source Term Compendium	At the 5/3/06 STWG meeting, there was discussion that there is a lot of source term information in the literature and various sites were doing source term work, but none of it was shared or in an easily accessible document. A source term working group webpage will be started. Working group members will provide copies or references to key source term documents that can be shared with other SCAPA members. These documents and references will be posted on the SCAPA website. A mechanism to ask the working group source term questions will be set up on the SCAPA website.	Cliff Glantz Carl Mazzola Jim Jamison Wayne Davis	Initial work has begun.

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06-14	Revisions to CMM require revisions to the CMM Excel file software.	Revise the automated CMM Excel workbook to include the expanded list of acute HCNs. Perform appropriate SQA review before posting the revised file on the SCAPA website.	Doug Craig Ray Lux Rocky Petrocchi	Initial work has begun now that AI 06-13 was completed.
06-15	Revisions to Existing HCNs using Revised CMM HCN development procedure	After changes to the CMM HCN development procedure are implemented, prioritize current 2,234 HCN-developed chemicals in TEELs Rev 19 that are affected by new acute HCNs and review them in database references to determine if chronic HCN was used as surrogate for an acute effect. Revise as needed. At same time, older HCN 4.00 chemicals having similar issues need to be reviewed and revised.	Rocky Petrocchi Doug Craig	Work will be initiated after AI 04-23 is complete.

List of Acronyms

AEGL	Acute Exposure Guideline Level
ARCON	Atmospheric Relative CONcentrations
BWG	Biosafety Working Group
CA	Consequence Assessment
CAMWG	Consequence Assessment Modeling Working Group
CAT	Consequence Assessment Team
CEWG	Chemical Exposures Working Group
CMM	Chemical Mixture Methodology
CMWG	Chemical Mixtures Working Group
DCF	Dose Conversion Factor
DOE	Department of Energy
DSA	Documented Safety Analysis
EFCOG	Energy Facility Contractor Group
EMG	Emergency Management Guide
EMI	Emergency Management Issues
EP	Emergency Planning
EPHA	Emergency Preparedness Hazard Assessment
EP & R	Emergency Preparedness & Response
G	Guide
HCN	Health Code Number
ICRP	International Council on Radiation Protection
LLNL	Lawrence Livermore National Laboratory
NA-41	DOE Office of Emergency Management
NARAC	National Atmospheric Release Advisory Center
NNSA	National Nuclear Security Administration
O	Order
SA	Safety Analysis
SAWG	Safety Analysis Working Group
SCAPA	Subcommittee on Consequence Assessment and Protective Actions
SIG	Special Interest Group
SNL	Sandia National Laboratory
SQA	Software Quality Assurance
STWG	Source Term Working Group
TEEL	Temporary Emergency Exposure Limit