

Agenda NCRP SC 2-2 Meeting Feb. 19-21, 2008

Marriott Pyramid Hotel, Albuquerque, NM

TUESDAY, FEB 19:

8:30-9:00 a.m. Opening/renew acquaintances/review agenda

9:00-12:00 p.m. Open comment session (review the major topics of the e-mail exchanges after the last meeting). These include:

- ALARA Principles (how do they apply in radiological emergencies)—Steve , lead
- Who really are the Decision Makers?—Debra /Tom Tenforde, leads
- International Conventions and includes what does “unamenable” mean to NCRP SC 2-2—Abel/Brooke , leads
- Voluntary Doses to First Responders; includes “when” do they apply—John L., lead
- Recovery Efforts—how do we transition from our report(s) to others being proposed by NCRP—John P./Tom Tenforde, leads
- What do you mean “Report(s)”; isn’t there only one we are working on!—Ken, lead
- New (potential) NCRP SC 2-2 members and/or advisors—Cass, lead

12:00-1:00 p.m. LUNCH

1:00-3:00 p.m. Continue Discussion of the Above Topics and other “Background” Issues to Resolve—John P./Ken, leads

3:00-4:30 p.m. Review current and modify, if necessary after the previous discussions, the Statement of Work and the Path Forward for Wednesday—John P., lead

WEDNESDAY, FEB 20:

8:00-12:00 p.m. Review Work Assignments (15-20 minute overview each)

- Scope/Goals—John P.
- Relationship to National Response Framework—Tammy
- International Issues—Abel
- Identify Needs of Relevant Organizations—Cass/Bob
- Policy/Stakeholder Issues—John L.

- Legal Issues—Cyndi/Tammy
- Conduct of Operations—Bob/Steve/Tammy
- State/Federal Issues—Cass/Bob
- Training/Exercises—Debra/Brooke
- Appendix (National/International) Responder Dose Decision Points—Cyndi/Brooke/Abel
- Public Information—John P./Brooke/ Debra
- Decontamination/Reception Centers—Ed/Jerry/Brooke
- Shelter/Evacuation Issues—Brooke/Steve
- Medical Triage/Medical Management—John L.
- Equipment—Brooke
- Review Commentary 19 Material—Jerry/Brooke

12:00-1:00 p.m. LUNCH

1:00-3:00 p.m. Open Discussion on Work Assignments and Issues Critical to Integration and Organization of the Report(s)—John P./Ken, lead

Presentation of Material of interest to NCRP SC 2-2—Brooke

- DHS/S&T Rad/Nuc Response and Recovery Program Overview
- Experts Workshop on Nuclear Weapon Effects in an Urban Environment: Summary and Highlights
- Injuries Resulting from Prompt Effects of a Low Yield Nuclear Weapon in an Urban Environment
- Nuclear Detonation Effects; The 10kT Scenario

THURSDAY, FEB 21:

8:00-10:00 a.m. Reformat Report(s) and determine what is “missing”; open discussion of Path Forward—John P., lead

10:00-12:00 p.m. Writing Assignments for NCRP SC 2-2 Members and discussion of Action Items for next meeting scheduled for April 16-17, 2008 at NCRP HQ, Bethesda, MD—John P./Ken

Minutes of the NCRP SC 2-2 Feb. 19-21, 2008 (all members present)

- Review of agenda and discussion of the audience for this report
- Look at Statement of Work to get initial blush on “who” the report is for
- Establish need to “pick and choose” from existing documents and set the bar a little higher for the defined decision makers
- Reviewed agenda and put Brooke’s presentation Tuesday Morning
- ALARA (Steve)—not reasonable to parse the difference between schools, nursing homes, prisons, etc. (Jerry); this is a “too hard” to cut this fine. Abel—the rest of the world uses “optimization”—best you can do and at some point you must address economics. What does the greatest good for the most people; utilitarian ethics with individual limits. Need to understand that ALARA as it applies and what are the legal ramifications as ALARA may be a “regulatory” issue. Definition of the terms critical as the same term may have different meaning as it regards to NRC license work, emergency response and recovery.
- Federal Guidelines not very helpful (multiagency agreement)—see Federal Register (2006); the term “unamenable” may have usefulness in that it discusses “what cannot be done” and therefore not under the regulation—not to be used in our document in order to maintain its original use by the international organization. See Brooke’s PP “plain language requirements”
- Need a term—“declaration of emergency” as opposed to “planned special exposure” to implement “legally” the higher exposures of First Responders in the case of an RDD/IND incident. Some sort of agreement set in advance which identifies who and what levels. Need OSHA buy-in to concept to ensure a timely response. Need to define (preferably in advance) what the “emergency exposure situations” are. Is it appropriate to have an upper limit and if not what is the obligation to inform the First Responder—a question to be answered. ICRP Publication 96 (10/2004) document is not easy to read; but the “right” maximum dose (1 Sv) may be there. While we cannot change interagency issues between some of the Fed Agencies; our report can still make recommendations (and maybe the “authority” needed to break some logjams).
- Volunteer Issue: need to define and consider (declared pregnant females) and better define people such as nurses responding to reception centers (comforters’ issue).
- We may need to discuss the issue of how often a responder could be called upon to respond to an event in which he/she could receive a dose of 50 REM. It could be annual, per event or lifetime.
- Jerry will send out the “corrections” to Table 4.1 in Commentary 19.
- Dose Guidance for emergency responder:
  - There are no dose restrictions if the benefits outweigh the rescuer’s own risks (table 1.1)
  - Life saving, preventing serious injury and prevent catastrophic conditions: 50 rem (0.5 Sv) in any given year.
  - Other immediate and urgent action to prevent injury and large doses to many people; 10 rem (0.1 Sv)
  - All other operations including recovery and restoration: Normal occupational dose limits 5 rem (50 mSv) in any one year and average 2 rem (20 mSv) per year over 5 years.

- Discussion is now on who are “decision makers”—for this document it is “at OR ABOVE the Incident Commander (IC)/Unified Command (UC)”. The audience includes Mayors, Councilors, Governors, etc. (political appointments, elected, etc.) See Statement of Work (bottom of page 1.) for our “current charter”.
- Be sure the new NCRP report on Decontamination (revised NCRP Report 65) is available on our website as is a version of the Vetter report. Need to ensure that both reports are available to SC 2-2
- Need for additional members—attorneys and the need for a “legal” review and that for the DMs we have had a review (can take place later in the process as we move forward with the committees work). We should use information contained in other reports (Steve Becker et al).
- Had Brooke’s presentation on 10 kT detonation effects in Washington, DC (Tuesday evening—most attended).
- Reviews of Writing Assignments (Wednesday):
  - John P. (Scope/Goals)—see Ed’s Power Point Threat Spectrum—John argues that we can have a tiered response that does not go into detail on what the “bad guys could learn from the report”—the classification of this material is an issue we should be sensitive to
  - Tammy (Relationship to National Response Framework (NRF)) see handout and refer to DHS and/or FEMA website for complete report. No changes at this point to Radiological/Nuclear Annex (but may be some coming)—comments to Tammy if necessary
  - Abel (International Issues)—two papers; the first is a collection of international issues—that the US is NOT obligated to. Biological Dosimeters requires an international effort to implement effectively. The second paper, “Key Decisions for Federal Decision-Makers”—three issues: notify any that could be affected, assist where possible and control waste. Most were not designed for terrorist attacks. This paper refers to “legally-Binding” obligations signed by the US. There is a tri-lateral agreement between US, Canada and Mexico that is in place for terrorist-related events in this hemisphere.
  - Cass/Bob (Identify Needs of Relevant Organizations)—local to state to federal resources as needed. Need to map to NRF. Level of efforts among states varies greatly—what you need to know vs. what can you do are very different. Must keep report focused on the availability of resources and the size limitations of the report. Report can be used as a resource to hold up to the State Plan and see where the holes are (use as critiquing guide). No size restrictions on our report—discussed later.
  - Debra (Response Challenges)—Expand on current issues; continue to use TOPOFF TWO and TOPOFF FOUR after action issues as key elements of our report. We may want to match Challenges to Decisions that need to be made to answer those challenges.
  - John L. (Policy/Stakeholder Issues)—This is the stakeholder list of activities. There are “compacts” and other agreements between states to provide mutual assistance. Concept of “all hazards” plans that describe the differences (Rad vs. Chem for example) while using the same structure overall for the sake of efficiency. Not all states will have

the same solution to a similar problem. Handling worried well and all the psycho-social issues and largely unresolved. We may want to use the ESFs in the NRF for guidance.

- Tammy/Cyndi (Legal Issues)—DOS for information. Should we try to address “legal” issues? The answer seems to be YES! Would there be different issues associated with an IND that will involve the Feds to a larger extent than for an RDD event? We need to better understand the relationship between the local, states, and federal response and decision pathways. Can we address these issues now—recognize that there are significant changes to how the response will be mounted? There will be a lot of Federal support coming and the locals need to know how to integrate these resources is a critical issue to give advice on.
- Bob (Conduct of Operations)—Based on three documents, the ASTM document, the NYC COO and NCRP Commentary 19. Includes the ESFs found in the NRP/NRF. Identified the Early, Intermediate and Late Phase of the response and emphasizes the four functions: command, life-safety, investigation and recovery. Explain the major difference between an RDD and an IND (could be that it is a “military response” vs. a local/state response).
- Tuesday evening—Brooke gave his first presentation on the Longport TTE followed Wednesday morning by the RadCPR presentation—most of us got parts of his presentations before we left—please treat as “sensitive” and do not distribute beyond this committee with permission—thanks.
- Brooke/Debra (Training/Exercises)—Examples of Table Top Exercises, etc.—may be only a two paragraph statement on value of training/drills/exercises. Ref NCRP Report 138 and Commentary 19. Entertain the idea of a flow-chart of actions (geared to decision makers).
- Cyndi
- (National/International Response Dose Decision Points)—Need to have some “upfront” commitment from OSHA to “waive” rules restricting exposures to 5 rem/year. Prefer to have decision to waive made in advance for terrorist-related rad/nuc event. May need to provide understanding of the 50/100 rem; i.e., it is not an upper limit, but rather a dose that causes the Emergency Responder to now exit the area (and receive some additional dose). No need (or reason) to measure or have a “limit” for eye and skin dose. Need to define “working ensembles” –uniform, gloves, APR, etc. See new table p.5.
- Ed (Decontamination/Reception Centers)—Bioassay issue (another NCRP report (Vetter) is being worked on); hand off to that report for details. May have to address this for the population in the undiluted plume in an RDD incident. May not be applicable for INDs. Highly effective as a psycho-social aspect of general population reassurance. Self-evacuation issue: how to decon, what to do with the material and the contamination in the home and/or car, etc. RECEPTION CENTERS—CDC guidance states that 140 people/1000 “victims” per hour/per shift. This is a Public Health Officer issue to help resolve and can piggy-back on PODs for distribution of medical supplies/inoculations/medication distribution. How can MMRS and National Guard

teams help. SC 4-1 (draft) may have good info—"Mgt of Persons Contaminated with Radionuclides". There may be facilities, other than hospitals, that can be used for the triage of "victims". Sport stadiums may be the best location if there are large numbers of "victims".

- Brooke (Shelter/Evacuation Issues)—this is, of course, highly dependent on the "size" of the RDD and the number of people involved. Is there a fire associated and it may be more puff-like than protracted—issues to address. There will be a number of options all of which need some, if not detailed, discussion. The 20 minute deposition time may be too short. Get Brookes' info on this subject. Shelter almost always is the preferred option; except when you are in a structurally-compromised building or outside and close to the "blast". ERs/ICs need to, in a short time, direct where people should go and/or how long they should stay in 'shelter'. People outside issue: Evacuate for some distance and then go inside a building. Brooke will redo.
- John L. (Medical Mgt/Medical Triage)—A lot of this can be lifted from NCRP Report 138. Expect many 'worried well'. Detail of this issue can most likely be found in the new NCRP report 65 and current CDC guidance. Decision Tree is available if needed/wanted. Can refer the Worried Well to Alternate Medical Treatment Sources/RC. DMATS may be pulled back as staff for AMTS (funding issue). The table at the end is taken from AMTS—good chart. May also be able to use ICRP 96 Appendix B. For Medical Mgt see Sec. 4-4 of NCRP Report 138. Triage is critical with alternatives for the non-seriously injured and only contaminated. Physical injuries will be treated first and radiological injuries (significant) can be triaged later. Hospitals are not all yet on board for the decon/treat serious injuries issues. (HAZMAT for Health Care—find this document for us please). Need to address issue of whether or not hospital personnel are or are not "occupational workers". Need to put in position description. May want to include the REAC/TS Radiation Victim Treatment flowchart (has some problems). May need 'extensive' medical appendix in this report. Credentialing issue may be helpful, but not our lead.
- Brooke (Equipment)— Should emphasize what you want to do and, THEN buy the appropriate set of instruments. Current (issued) ANSI standards are not very useful— new ones may be better. You need someone who knows instruments to be a part of the process. Need to list the most important characteristics. Need to write up "function before form" and list which classes and types of instruments you might need. Use words instead of graph or table. Need to address issue of Portal Monitors. Decision is critical on how to manage budget and priorities. There is value in being able to say you are consistent with standards. Include calibration and maintenance in the overall costing. Stay-time in an 'important' function of some of the instruments. Need critical instructions for proper monitoring techniques (goes in training section).
- Jerry (Review Commentary 19 Material)—Will use 19 and 138 where ever possible—see handout. May want to address nasal swabs (important or not?). Need to consider the .1 uCi (spot measurement) and what it means.
- Discussed the Path Forward and revised the report outline and the writing assignments—find this in a separate document.