

Subcommittee to Assess Health Risk Assessment, Burn Pit Exposures, Balad Air Base, Iraq

W Halperin et al

April 24, 2008

DHB Mtg, Tacoma Wa

Outline

- Charge to DHB
- Subcommittee Members
- Balad Air Base
- Health Risk Assessment: General
- Health Risk Assessment: Balad
- Status: Consolidation of Comments on revised HRA (and process)
- Path forward

Memorandum (Embrey → Poland)

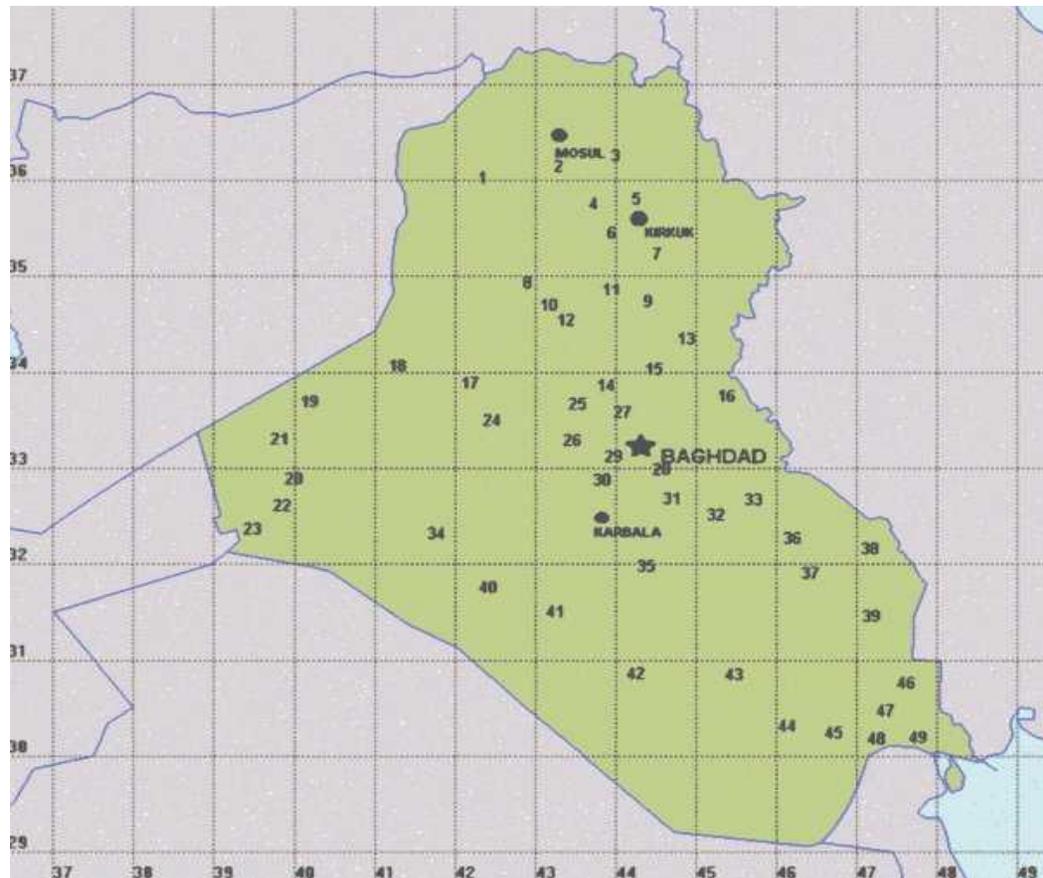
2/29/08

- Burn Pits for Refuse
- Exposure to smoke at Balad
- Air Sampling
- Spring 2007: Erroneous high levels of dioxin exceeding military exposure guidelines
- Pre-Post Serosurvey (n=25); no significant exposure to dioxins
- Model errors → erroneous risk estimates
- Review Revised HRA before dissemination to field
- DHB recommendations for further assessments
- “Quickly; earliest convenience”

Subcommittee Members

- G Carlson*
- W Halperin
- ()*
- W Lednar
- J Lockey
- T Mason
- M McNeill

Balad, Iraq



MAJOR IRAQI AIRFIELDS

- | | |
|---------------------|---------------------------|
| 1. TALL AFAR | 26. AL TAGADDUM |
| 2. MOSUL | 27. BAGHDAD/MUTHENNA |
| 3. ERBIL NORTH WEST | 28. RASHEED |
| 4. QAVYARAH WEST | 29. SADDAM INTERNATIONAL |
| 5. KIRKUK | 30. AL ISKANDARIYAH NEW |
| 6. AL FATHAH | 31. SHAYKA MAZHAR |
| 7. TAL ASHTAH NEW | 32. AN NUMANIYAH |
| 8. KZ | 33. UBAYDAH BIN AL JARRAH |
| 9. TUZ KHURMATU | 34. MUDAYSIS |
| 10. AL SAHRA | 35. HEJEF NEW |
| 11. TIKRIT EAST | 36. KUT AL HAYY EAST |
| 12. TIKRIT SOUTH | 37. QUALAT SIKAR |
| 13. SALUM | 38. AMARA NEW |
| 14. SAMARRA EAST | 39. QUALAT SALIH |
| 15. BALAD SOUTHEAST | 40. WADI AL KHIRR NEW |
| 16. SUBAKHU | 41. GHALAYSAN NEW |
| 17. AL ASAD | 42. AS SALMAN NORTH |
| 18. H1 | 43. TALLIL |
| 19. H2 | 44. JALIBAH SOUTHEAST |
| 20. H3 | 45. AR RUMAYLAH SOUTHWEST |
| 21. H3 NORTHWEST | 46. BASRAH INTERNATIONAL |
| 22. H3 SOUTHWEST | 47. SHAIBAH |
| 23. RUWAYSHID | 48. AL MUFRASH |
| 24. AL MUHAMMADI | 49. SAFWAN |
| 25. HABBANIYAH | |

Risk Assessment in the Federal Government: Managing the Process, NAS, 1983 (Red Book)

- Hazard Identification: Are agents potentially hazardous?
- Dose-Response: Adverse dose related to exposure?
- Exposure Assessment: Magnitude, duration, route; by person, place, and time
- Risk characterization: Estimation of risk acknowledging uncertainties

HRA Continued

- Risk assessment; Risk management; Risk Communication
- Uncertainties (confidence intervals)
- Errors (eg: data quality, data entry, etc)
- Modeling and prediction:
- **Brief Intro: Samet et al; Epidemiology and Risk Assessment, American Journal of Epidemiology v148; #10, 1998**

Health Risk Assessment, Balad

- Areas sampling for products of combustion
- Assessment of respiratory disease surveillance data
- Pre-Post deployment sero-survey for TCDD
- Quantitative Risk Assessment

Status:

- Ad hoc informal review (subject matter experts) of initial report: Completed Fall 2007.
- Internal release of results to field commanders and Office of Sec Def
 - Release did not reflect ad hoc SME comments
- Revised Health Risk Assessment
- Request to DHB for formal review
- Comments on Revised HRA received from members; pending consolidation, consensus, review
- Questions from DHB?
- Other questions?