

October 8, 1996

MEMORANDUM TO: Michael J. Bell, Chief  
ENGB/DWM/NMSS

THRU: R. A. Weller, Section Leader /S/  
Engineering and Material Section  
ENGB/DWM/NMSS

FROM: Mysore Nataraja, Sr. Geotechnical Engineer /S/  
ENGB/DWM/NMSS

SUBJECT: TRIP REPORT - COURSE ATTENDED AT HARVARD SCHOOL OF PUBLIC  
HEALTH

I attended a short course ("Analyzing Risk: Science, Assessment and Management") offered by the Harvard Center for Risk Analysis at the Harvard School of Public Health (HSPH). The lectures represented a compendium of condensed versions of several graduate courses offered at HSPH. The major topics covered included:

- (1) The role of Toxicology in risk assessment;
- (2) The principles of Epidemiology and its application to risk assessment;
- (3) Methods of estimating exposure;
- (4) Dose-response modeling for carcinogens;
- (5) Current methods and future directions in risk assessment;
- (6) Physiologically-based pharmaco-kinetic models;
- (7) Methods for ranking risks;
- (8) Interaction of risk assessment and risk management; and
- (9) Communicating risk.

The voluminous course material was covered by the highly qualified and experienced faculty of the HSPH and some outstanding invited speakers. The interesting aspect of the short course was the numerous case studies that were used as homework assignments for discussion during class.

The material covered was too broad for any one individual to absorb (the class was a mix of people with different educational backgrounds and experience, representing people from the industry, academia, and government). Nevertheless, the lectures and discussions provided an opportunity to listen to experts from different disciplines and learn about their approach to studying risk relative to public health and safety.

I believe the course is useful to almost anyone with some interest in understanding and analyzing various aspects of risk. It is especially important to us in NRC to understand that radiological safety is but one of several important contributors to public health. (I might add that Dr. Dade Moeller, former chairman of ACNW, covered "risk-based radiation standards.")

Anyone interested in reviewing the material covered in the course, may contact me at 415-6695 and borrow the notes for reference.

cc: S. Cornell (w/class evaluation)

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