Geophysical Research Abstracts, Vol. 8, 10713, 2006 SRef-ID: 1607-7962/gra/EGU06-A-10713 © European Geosciences Union 2006



Diagnosis of NATECH risk in urban areas: A methodology for preliminary assessment

A. M. Cruz (1, 2) and N. Okada (2)

(1) University of North Texas, Denton, TX 76205, USA, (2) Integrated Management for Disaster Risk, Disaster Prevention Research Institute, Kyoto University, Kyoto, 611-0011, Japan (amcruz@unt.edu, okada@imdr.dpri.kyoto-u.ac.jp)

Natural disasters have the potential to trigger hazardous materials releases in densely populated and industrialized areas. However, there is little guidance available on how local governments and communities can assess natech risk, or on how they can prepare for or avoid natech disasters. In addition, local governments often do not have the resources nor the expertise to carry out detailed hazard risk assessment and vulnerability studies. Thus, a methodology that allows experts as well as non-expert personnel to easily and quickly identify those areas of highest natech risk would be valuable. Once areas of high natech risk are identified, resources could be directed for more in depth analysis of problem areas.

This work presents a methodology for diagnosis of natech risk in urban areas. The methodology is intended for use by local government officials and community representatives. Determining factors related to vulnerability, exposure and hazard are presented and qualitative measures are recommended. Advantages and limitations of the are discussed as well as its use for identifying factors which contribute most to natech risk in a particular region.