

## FOREWORD

Although the United States does not currently offer general support to UNESCO, there is a global awareness of the importance of the International Hydrological Programme (IHP). Because of this awareness the United States government has sponsored the activities of this working group on groundwater contamination risk assessment. This book represents a special contribution of the United States, although it was an international effort. The International Commission on Groundwater, through which this project was conceived and administered, is proud that this important topic is now represented in the extensive scientific literature of the IHP.

Groundwater contamination poses potentially serious public health problems worldwide. In order to logically evaluate the hazards that contamination may represent, one must understand both risk assessment and risk management. Central to this understanding are tremendous uncertainties that distinguish groundwater contamination problems and the health risks they present. As noted clearly in this book, the sources of uncertainty span from poor scientific understanding of physical and chemical behavior of subsurface contaminants, to extrapolation in dose-response relationships, to a poor ability to predict the impact of risk-controlling policies. Until these uncertainties are collectively understood and quantified, the perception of risk on the part of individuals and policy makers will remain erroneous.

It is clearly an impossible task to remediate each and every groundwater contamination site. The estimation of true health risks should play an essential role in determining the fate of our reaction as a society to such problems. This book provides a common ground for the continued discussion of risk due to groundwater contamination. It contains both a state-of-the-art overview of this intricate topic and practical guidance to move from risk assessment to reasonable risk-management solutions.

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