

Book Reviews

Natural Disaster Mitigation in Drinking Water and Sewerage Systems: Guidelines for Vulnerability Analysis

Published by Pan American Health Organization
1998, 86 pp. ISBN 92 75 12250 4

Reviewed by Bob Handby
Environmental Health Officer
Moyné Shire Council

This book uses the experiences from disasters in Latin America and the Caribbean to provide guidelines for emergency preparedness and response programs for companies and authorities which manage water and sewerage schemes.

The emergency plan for these services is based on a vulnerability analysis followed by measures to improve structure of the scheme to improve reliability and a plan to mitigate or reduce the impact of the disaster.

Although focusing on sewerage and water supplies which have been identified as services essential in a disaster and which have a potential for major public health significants, the principles discussed in the book are relevant to any large industry or authority for example, those providing power, gas or communications.

The book suggests a process, which includes a vulnerability analysis of the system and a hazard analysis. Vulnerability is described as the probability that an event will occur and the likely affect on the system.

The planning process is designed to improve the capacity of an emergency response and protocols for routine operation. It is suggested that an Emergency Committee be formed to draft a response plan. This committee should have representation from the highest level of management. The committee should prepare a plan considering the vulnerability analyses, the plan should be up to date, simple and practical, it should include training of key personnel and testing with simulated exercises.

The basis for a vulnerability analysis should include identification of hazards and possible damage to components. Natural hazards including earthquakes, hurricanes, floods, landslides, volcanoes, droughts and fires should be considered.

The vulnerability Analysis requires knowledge of the system, its operation as well as potential hazards to the system.

The information contained in the book is concise and easy to follow; it is a valuable resource for industries or authorities it is designed to assist. Recent disruptions to the gas supply in

Victoria highlights the need to have emergency plans in place. Authorities such as water authorities, which manage both water and sewerage systems should find this booklet very interesting and useful. Authorities and companies with emergency plans should also satisfy themselves that services that they depend on for example, power supply also have developed an appropriate plan.

The book is not designed for persons working in the field during an emergency; it is a book to assist with pre-emergency planning.

An emergency planning approach using the vulnerability analysis detailed in this book should be an effective means of reducing the effect of a disaster.

This publication can be obtained at PAHO Online Bookstore: <http://publications.paho.org> (a secure ordering site) or through the PAHO Distribution Center:

paho@pmds.com, Fax: 301 206-9789
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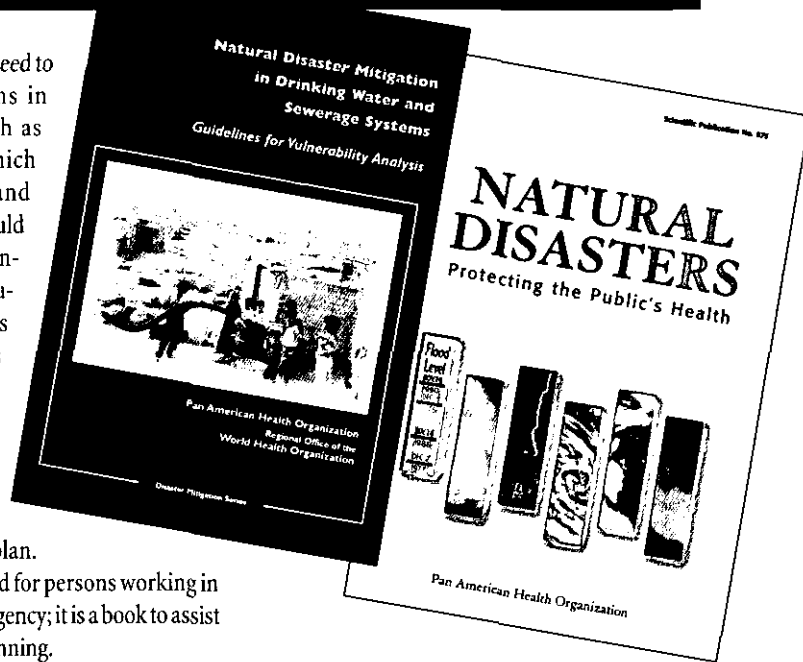
Bob Handby is an environmental engineer with a diploma in Public Health. He works for the Victorian State Health Department as a Health Officers and Senior District Health Inspector. Bob has been involved in this field as a Red Cross delegate for over 16 years and has been responsible for improving sanitation conditions by building pipe systems, construction latrines and educating local communities on good sanitation. Bob's work in this area has taken him to Uganda, Iraq, Fiji, Rwanda, Democratic Republic of Congo, Montenegro, Vanuatu and Indonesia.

Natural Disasters: Protecting the Public's Health

Published by Pan American Health Organization
2000, 130 pp. ISBN 92 75 11575 3

Reviewed by Duncan Moore
AIEH (Vic) Division Emergency Management SIG

Although the above publications deals primarily with countries in the Americas, and in management of response at an international level and



does not make reference to public health issues that will arise following a natural disaster emanating from a fire. The publications is a great resource for relevant personnel responsible for overseeing the Prevention, Preparedness, Response and Recovery aspects of Public Health Emergency Management Planning.

Many public health issues that arise are generic in nature, and will need to be addressed in any disaster. But what this publications does, is not only clarifies and reaffirms the role of relevant public health professionals in a disaster but, dispels some of the myths around public health issues, acts as an 'aide memoir' and provides information on issues that many public health personnel in Australia involved in Disaster Management may not normally consider.

In the context of this publication, public health embraces both the curative side of mass casualty and the Response and Recovery management pertaining to public health such as sanitation, food, water and shelter.

In addition to being a good resource to public health personnel, it also provides a good insight into public health issues for other disaster agencies and organisation.

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