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# PREFACE

Forest fires, either man-made or natural, as a consequence of extreme drought, occur in many parts of the world. Smoke from forest fires consists mainly of fine particulate matter in the respirable range and to a lesser extent, of carbon monoxide and polycyclic aromatic hydrocarbons. During the episode of smoke in the South East Asian countries, monitoring of particulate matter of mean aerodynamic diameter at or below 10  $\mu\text{m}$  has shown that short-term air quality standards of WHO's 1987 air quality guidelines for respirable particulate matter are largely exceeded.

The recurrence of transboundary smoke originating from uncontrolled forest fires in many countries around the world causing acute and long-term respiratory health problems requires a comprehensive strategy based on broad international consensus. Any comprehensive strategy must include:

- a) rapid detection capability of uncontrolled vegetation fire events on a global scale;
- b) the gathering of useful and reliable monitoring data and health surveillance;
- c) the dissemination of information to all affected parties for appropriate decision making; and
- d) the development of national environmental and health response plans to vegetation fire events, based on an international guideline.

The WHO, in a collaboration of the Department of Emergency and Humanitarian Action (EHA) and the Department of Protection of Human Environment (PHE), with the support of the Ministry of Health, Japan, UNEP and WMO convened an Expert Meeting on the Health Guidelines for Vegetation Fire Events in Lima, Peru, 6-9 October 1998. Background papers on the various issues mentioned above were contributed to the

The international, multidisciplinary group of contributors to and reviewers of the Health guidelines are listed in the "Participant list" section of the Health Guidelines in Annex K. Special thanks are due to the chairpersons of the WHO-UNEP-WMO expert task force meeting held in Lima, Perú, in October 1998: The conference chair Dr Johann G. Goldammer, Max Planck Institut for Chemistry/Global Fire Monitoring Center, and the chairpersons of the two working groups, Dr Michael Brauer, University of British Columbia, and Dr Joel Levine, NASA Langley Research Center. Special contributions are gratefully acknowledged to those who provided the background papers compiled in this document, and to those who contributed to the success of the WHO-UNEP-WMO expert meeting:

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# CONTENTS

	Page
<i>Preface</i>	1
<i>Contents</i>	6
<b>I MONITORING OF FOREST FIRE EVENTS</b>	
Early warning systems for the prediction of an appropriate response to wildfires and related environmental hazards <i>J G Goldammer</i>	9
Smoke from wildland fires <i>D E Ward</i>	71
Analytical methods for monitoring smokes and aerosols from forest fires: Review, summary and interpretation of use of data by health agencies in emergency response planning <i>W B Grant</i>	87
The role of the atmosphere in fire occurrence and the dispersion of fire products <i>M Garstang</i>	102
Forest fire emissions dispersion modelling for emergency response planning: determination of critical model inputs and processes <i>N J Tapper and G D Hess</i>	123

**II ASSESSING HEALTH IMPACTS OF FOREST FIRE**

Approaches to monitoring of air pollutants and  
evaluation of health impacts produced by  
biomass burning

149

*J P Pinto and L D Grant*

Health impacts of biomass air pollution

186

*M Brauer*

A review of factors affecting the human health  
impacts of air pollutants from forest fires

258

*J Malilay*

Guidance on methodology for assessment of  
forest fire induced health effects

275

*D M Mannino*

**III CASE STUDIES OF HEALTH EFFECTS OF  
FOREST FIRE**

Gaseous and particulate emissions released to the  
atmosphere from vegetation fires

284

*J S Levine*

Basic fact-determining downwind exposures  
and their associated health effects, assessment of  
health effects in practice: a case study in the  
1997 forest fires in Indonesia

299

*O Kunii*

	Page
Smoke episodes and assessment of health impacts related to haze from forest fires : Indonesian experience <i>Y Dawud</i>	317

Smoke episodes emissions characterization and assessment of health risks related to downwind air quality - case study, Thailand <i>K Phonboon, O Paisarn-uchapong, P Kanatharana, S Agsorn</i>	334
---	-----

#### **IV MANAGING FOREST FIRE EMERGENCIES**

Review of government environmental & health policies, legislation and emergency response mechanisms <i>A Bakar bin Jaafar</i>	382
--	-----

Role of the forest fire emergency standards <i>M I Marileo</i>	404
---	-----

Guidance on measures in forest fire emergency cases <i>R A Johnson</i>	412
---	-----

Public information and mitigation measures for a haze episode: the Singapore experience <i>P L Ooi, A Hakeem, K T Goh, M Brauer</i>	467
--	-----

Application of appropriate short-term air quality guidelines <i>K Phonboon</i>	486
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