



# World Plumbing Council



*From left to right Andy Watts, Dr. Jamie Bartram, Hiroki Hashizume and Russ Chaney. Andy is holding the October 2001 WPC draft revision of GoHAP first published by WHO in 1982, a copy of which is held by Russ.*

## **REPORT ON MEETING WITH WORLD HEALTH ORGANISATION REGARDING GUIDELINES ON HEALTH ASPECTS OF PLUMBING (GoHAP)**

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On 5 November 2001, we met for approximately two hours with Dr. Jamie Bartram and Hiroki Hashizume of the World Health Organization (WHO) to discuss the status of GoHAP. Dr. Bartram had been provided with a copy of the proposed final version of GoHAP for approximately 10 days which allowed him time for a brief review.

He provided us with his initial reaction to the document and indicated that he would provide us with a letter in the near future containing his critique along with critiques by two other WHO reviewers. As a result of a very recent death in Dr. Bartram's family, we do not expect to receive his letter prior to the end of the year. However, we will summarize the preliminary feedback received from him as well as some informal comments received from one of the WHO reviewers.

Both Dr. Bartram and the first reviewer agreed that the document provides a comprehensive framework for a broad discussion of good plumbing practices to safeguard health worldwide. In the words of Dr. Bartram's peer reviewer, "[GoHAP] is a practical and useful document that could well be referenced in the WHO Drinking Water (DW) Guidelines and it should be disseminated in developing countries". Dr. Bartram concurs that the document is very well written and is presented to the WHO in a more advanced form than they typically receive at this stage. However, standard WHO practice is to request revisions to a proposed document after the initial draft received by them has been subjected to peer review, and GoHAP is no exception.

Following are some of the recommendations for areas requiring revision. Dr. Bartram made the following suggestions:

1. Change title of document to “Health Aspects of Plumbing”.
2. The Preface should be revised to more fully explain the connection between the 1982 version of GoHAP and the revised edition prepared by the WPC.
3. There should be a common theme throughout GoHAP promoting the importance of good plumbing practices to health. In Dr. Bartram’s words, “*the tentacles of the health logic*” must run throughout the publication.
4. The document should include a catalogue of incidents attributed to unsafe plumbing practices which have adversely impacted on public health.
5. GoHAP should include a perspective from one or more representatives from the public health community stating how safe plumbing practice has improved the public health in developing countries.
6. Case studies from developing nations (e.g., Pacific Rim, Africa or India) should be inserted throughout the publication.
7. The subject of disinfection of potable water systems should be addressed in a separate area of the document rather than in one of the Annex’s. Dr. Bartram stressed that disinfection procedures is a critical link to health aspects of plumbing.
8. The document should include examples of good plumbing practices related to lead and copper plumbing, as well as the use of asbestos.
9. Dr. Bartram indicated that, in certain areas, the text is too prescriptive. He recommended that serious thought be given to diminishing the prescriptive language so that plumbing principles are separated from general discussion and specific recommendations.
10. Dr. Bartram suggested that we consider restructuring the order of presentation of the material contained in various chapters as well as some of the chapter titles.
11. The measurement system should be standardized. Consideration should be given to listing metric units as the primary unit of measurement and English units in parentheses.
12. All cited material (including charts, graphs, tables and quotes) need to be referenced with written authorization from the originator(s).
13. The document should contain links to other WHO publications (i.e., Guidelines on Drinking Water Quality; Materials and Chemicals).

The first peer reviewer made the following specific comments:

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Additional discussion should be inserted on other pipe materials like CPVC. Additional information should be added related to corrosion concerns for copper pipe.

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WHO Drinking Water Guidelines should be referenced and the reader should be provided with information on how to access such guidelines.

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The Water Reuse chapter should provide more detail. In the Reclaimed Water section, references should be provided for the definition of “Tertiary Treatment” and for the standards for median seven day total coliforms of 2.2 per 100 ml. and max 23/100 ml. and turbidity of < 2 NTU. These look like they were taken from the California title 22 standards for agricultural re-use water. The discussion is inadequate and probably misleading and not essential to the topic, and the section should probably be deleted.

In his concluding thoughts, the peer reviewer remarked favorably on the quality of the document and indicated that the audience which would benefit most from GoHAP would be decision-makers and practitioners in less developed and developing countries.

Based on the information received to date,

In order for the GoHAP Administrator (IAPMO staff) to submit this document to the WHO for formal peer review by the time of the WPC Berlin Conference it is necessary that all of the aforesaid revisions be completed by 1 April 2002. In order to make these revisions, it will be necessary to do the following:

1. First and foremost, immediate attention must be given by each contributor to Dr. Bartram's requirement that all cited material (including charts, graphs, tables and quotes) need to be referenced with written authorization from the originator. The GoHAP Administrator has asked for this information numerous times without success. This document will not be accepted unless and until all contributors provide this information.
2. In the near future, the GoHAP Administrator will be requesting assistance from the contributors of chapters which require revisions. This support is deemed essential as there still remains a substantial amount of work to be completed in a short period of time.

*Andy Watts, Secretary WPC*

*G P Russ Chaney, Executive Director, IAPMO, GoHAP Project Administrator*

*5 December 2001*