

on local exhaust ventilation. The items discussed include the various hoods which can be used and there is also given some information on fans, ducting and filters. Some of the different types of hood are shown on diagrams and figures at the end of the chapter and some design parameters, such as face velocities at hoods, have been given as well as methods of calculating air flow rates.

As a minor criticism of these particular sections it might have been better to place the chapter discussing ventilation before that on respiratory protection. This is because the provision and use of personal protective equipment should normally be regarded as providing back-up for other techniques which aim to control the risk at source (see Guidance Note EH18 issued by the Health and Safety Executive).

The publication gives a very full account of all the occupational hygiene aspects associated with the sources, characteristics and control of welding fume. It is essentially a reference work and each chapter deals with a specific topic and it is because of its structure that there is a certain unavoidable repetition of some information. It is expected that professional hygienists will already be familiar with the principles concerning the sampling and analysis of welding fume, but the considerable reference sections in individual chapters and in Volume 3, which is a critical literature review, are an invaluable information resource. The publication will be of interest to most hygienists involved in this field and it will also be of use to engineers, managers and safety officers who have responsibility for health and safety of welders.

R. M. WAGG
J. WATKINS

Asbestos Fibres in Drinking Water by B. T. COMMINS. Commins Associates, Maidenhead, May 1983. Price £25 + postage.

THE AUTHOR, who has over 30 years' experience as a specialist in Environmental Pollution, has examined the published information relevant to the potential hazards to humans associated with the presence of asbestos fibres in drinking water supplies. The report (of 73 pages) contains an introductory review on the composition and general uses of asbestos minerals, and the potential sources of asbestos in drinking water supplies. This is followed by a detailed examination of the problems of sample preparation and analysis of particulates in drinking water, and a very useful tabular summary of the published information on the concentrations of fibres found in water supplies in developed countries. The significance of these concentrations is then examined in the light of evidence available from epidemiological and animal experimental studies on the potential hazards of ingested asbestos.

→ It is concluded that there is no substantiated risk of adverse health effects from asbestos exposure in normal drinking water supplies. It is also emphasized that any adverse health effects associated with certain demonstrated heavy contaminations of drinking water (from natural mineral deposits, or from effluent sources) would be likely to occur at a level so low as to be undetectable. The risks associated with the
→ widespread use of asbestos cement pipes for the transport of potable water are therefore considered to be negligible.

Over 200 reports and publications are included in the bibliography. There are,

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however, occasional instances where the author has not accurately quoted the cited literature, and this does detract slightly from the value of the report as an authoritative reference document. However, these discrepancies do not affect the strength of the conclusions that are presented, and the report should be a valuable source of information for those concerned with Environmental Pollution.

R. E. BOLTON

Non-ionizing Radiation Protection. Edited by MICHAEL J. SUESS, World Health Organization Regional Publications, European Series No. 10, Copenhagen, 1982 (ISBN 92 890 1101 7) viii + 267 pp. Price SF29.00 (£10.50).

THIS WHO Regional Publication is the culmination of some ten years of work by over 200 scientists from 20 countries in Europe, North America and Asia working through five scientific groups. Seven chapters deal with ultraviolet, optical (with particular reference to lasers), infra-red, microwave and radiofrequency radiations and with electric and magnetic fields at power frequencies, ultrasound and regulations. In support is an introduction by Dr. Suess, WHO Regional Officer for Environmental Hazards, a note on terminology, a glossary of terms used and two annexes giving acknowledgements and listing the membership of the working groups.

Six of the chapters describe the physical properties, sources, biological effects, dosimetry and protection standards of each of the types of radiation in turn with by far the longest chapter being devoted to microwave and radiofrequency radiation. The seventh chapter, on regulation and enforcement procedures, discusses the methodological aspects and not the actual regulations or codes of practice in force in various countries.

The volume presents an authoritative compilation of information authenticated by over eight hundred references, mainly to work published before 1978, arranged by subject at the end of individual chapters. It is a very useful source book for those with responsibilities for protection against non-ionizing radiation.

D. HUGHES

Coal Conversion and the Environment. Chemical, Biomedical and Ecological Considerations (Proceedings of the Twentieth Hanford Life Sciences Symposium, October 19-23, 1980). Edited by D. D. MALHLUM, R. H. GRAY and W. D. FELIX, U.S.A. DOE Symposium Series No. 54, 1981 (ISBN 0 87079 128 1) xii + 608 pp. Price \$24.75.

THIS weighty volume contains the proceedings of the 20th Annual Hanford Life Sciences Symposium convened in 1980. The 45 papers presented at the symposium are reproduced here, thankfully with a consistency of style, layout, terminology and referencing that is sometimes absent from conference proceedings.

The topics under consideration relate to various coal conversion processes under active development in the U.S.A., and concentrate mainly on the solvent refined coal liquefaction process (SRC-11) and the high Btu coal gasification process (HYGAS).