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Book Reviews

Beryllium Toxicity (Case Study 19 in Environmental Medicine), US Department of Health and Human Services, Public Health Services, Agency for Toxic Substances and Disease Registry, 1600 Clifton Rd., N.W., Atlanta, GA 30333, 20 pp., July 1992, no charge.

Beryllium, element no. 4, MW 9.012, is a metal from the mineral beryl, and produces alloys that are extremely elastic, hence its role in making gears, springs, and non-sparking tools. The environmental alert notes that beryllium produces a range of health effects from sensitization without evidence of disease to clinically apparent pulmonary disease. Chronic beryllium disease may be misdiagnosed as sarcoidosis. New immunologic tests promise early detection of beryllium disease and differentiation from other interstitial lung diseases.

This booklet begins with a case study of a 14-year-old daughter of a dental laboratory technician, who may be at risk of exposure to beryllium (casting and grinding alloys used in dental prostheses), as well as to mercury (mixing dental amalgams). Workers casting or grinding beryllium can expose members of their households to beryllium dust brought home on workers' hair, skin, and clothes. Household members have developed chronic beryllium disease.

Chronic beryllium disease manifests itself almost solely in the lungs. If beryllium becomes embedded in skin, ulceration and poor wound healing can ensue.

An extensive suggested reading list, along with other references, is given, as well as standards and regulations for beryllium. Beryllium has been designated a hazardous air pollutant under the Clean Air Act, and EPA advisory for beryllium in water is less than 68 ng per liter (ng/l) for consumption of 2 l of ambient water.

This booklet will be most useful for the primary care provider's knowledge of the subject, and will be of interest to industrial hygiene and chemical safety personnel. It is available at no cost from the address in Atlanta given above.

HOWARD H. FAWCETT

Proceedings of the Nineteenth Annual RREL Hazardous Waste Research Symposium, EPA/600/R-93/040, U.S. Environmental Protection Agency, Washington, DC., 1993, 255 pp. (no price given).

The U.S. EPA's Nineteenth Annual Risk Reduction Engineering Laboratory Hazardous Waste Research Symposium was held in Cincinnati, Ohio in April,

1993. The purpose of the symposium was to present the latest significant research findings from ongoing and recently completed projects funded by the U.S. EPA and the five U.S. EPA-funded, university-based Hazardous Substance Research Centers.

These proceedings are divided into three sections. The first two sections contain extended abstracts approximately five pages long, of the papers orally presented at the symposium while the third section contains 31 brief (one-page) abstracts of the poster display.

The 46 papers in the first two sections of the proceedings span a wide range of topics including: remedial action, treatment and control technology for waste disposal, landfill liner and cover systems, underground storage tanks, municipal solid waste management and the demonstration and development of innovative/alternative treatment technology for hazardous waste. Alternative technology subjects discussed include pollution prevention, thermal destruction of hazardous wastes, field evaluations, existing treatment options, emergency treatment processes and biosystems for hazardous waste destruction. Drinking water treatment and management, corrosion, organic removal, health effects and ultrafiltration were discussed in other papers.

The book was photoreproduced from manuscripts submitted by the authors. Each paper carries the name, organization, address and telephone number of the presenter(s); many fax numbers of the presenters were also given.

GARY F. BENNETT

Technology, Law, and the Working Environment, by N.A. Ashford and C.C. Caldart, Van Nostrand Reinhold, New York, NY, 1991, ISBN 0-442-23926-2, 616 pp., $49.95.

In the preface to their books, the authors write:

"Technology is the mainstay of the modern industrial state. New developments in materials, manufacturing processes, final products, and work organization are critical to a dynamic economy. However the development and utilization of technology often has negative consequences for workers, such as injury and diseases and disability and displacement. The legal system has responded in many ways to these problems, and their response affects employers, workers, and a variety of workplace professionals."

Consequently, understanding health and safety regulations and the laws that govern industrial relations is crucial to successful management and technological planning. And in writing the textbook to enhance this understanding the authors are uniquely qualified. As might be expected from the title, both authors have law (J.D.) degrees. Beyond that, one author holds a doctorate in chemistry and the other a Masters of Public Health (MPH) degree.