Proceedings of the Tenth Technological Seminar on Chemical Spills (St. Johns, New Brunswick) 1993, published by Technology Development Branch, Environment Canada, Ottawa, No ISBN, 1993, 318 pp., no price given

Nineteen papers presented at this conference are found in the proceedings almost equally divided among the five major headings below:

- 1. Countermeasures: Containment and removal
- 2. Countermeasures: Treatment and in-situ technology
- 3. Behavior, fate and effects
- 4. Safety and analytical
- 5. The spill problem

In most conference proceedings there is a wide variety of papers of variable quality. In this case, the variety is there, but the variable quality is not. All the papers I read were excellent.

I most enjoyed the account of spills and spill response involving the following:

- 1. Arsenic trioxide lost at sea in drums from a container ship
- 2. A pesticide spill into a remote river that resulted from a truck accident
- 3. Ammonia; an overview of its environmental hazards
- And I read papers in the following cleanup areas:
- 1. BTEx removal from ground water evaluation of technologies including UV and TiO₂ catalysis
- 2. Organic removal from soil evaluation of several methods including solvent extraction and advanced oxidation
- 3. Heavy metal removal from soil by washing
- 4. Arsenic removal from water by adsorption and microfiltration
- 5. Hydrocarbon removal from soil by low-temperature thermal desorption
- 6. N-nitroso dimethylamine oxidation of water including a TiO_2/UV process evaluation

Clearly there is a wide range of papers on some very state-of-the-art technology. Not reviewed here were several research papers dealing with PCBs and BLEVEs which were also interesting.

A companion volume is the proceedings entitled The Practical Approach to Hazardous Substance Accidents.

GARY F. BENNETT

The Practical Approach to Hazardous Substance Accidents (Proceedings of a Conference ER93CS, St. Johns, New Brunswick, Canada, September 1993, organized by the Major Industrial Accidents Council of Canada), 460 pp., no price given, no ISBN

This book is a companion volume to the proceedings of the Tenth Technical Seminar on Chemical Spills.

A total of 45 papers (41 in English and 4 in French) given at the conference have been published under the following major headings:

| 1 | <u>-</u> |
|---|---------------|
| Topic | No. of Papers |
| Prevention | 10 |
| Preparedness | 8 |
| Response | 8 |
| Public awareness and communication | 3 |
| Medical, psychological and social aspects | 3 |
| Legal aspects | 5 |
| Hazardous materials management — | |
| A review of all aspects of | |
| their proper handling | 4 |
| Accidental release of air toxins | |
| Emergency planning | 4 |

The papers were quite varied in content, detail and source. Although most of the authors were Canadian, several papers were presented by US and European personnel.

I scanned the proceedings, stopped to read in the two areas that interest me most: spill incident/response and prevention/response planning.

In the first category I read several extremely interesting papers on accounts of spills involving:

- arsenic trioxide into the ocean
- chlorosulphonic acid in a train derailment
- aromatic hydrocarbons in a train derailment
- explosion on a drilling rig

In the second category (prevention/response planning), there were several excellent planning papers dealing with:

- risk of transport of chlorine
- nuclear facility emergency planning
- municipal/industrial planning
- transboundary emergency response preparedness

As a conference volume, I'd have to give this one a passing grade. The book has been photo reproduced; each paper contains the author's name, organization in full address, and key words. My only major criticism is that the key words were not indexed.

GARY F. BENNETT

Clean Air Handbook, by F. William Brownell assisted by other members of the Law Firm of Hunton & Williams, Government Institutes, Rockwell, MD, ISBN 0-86557-343-7, 1993, 341 pp., US\$ 79.00

The preface begins with a gross understatement:

"The Clean Air Act of 1990 is the most complex (reviewer's emphasis added) piece of environmental legislation ever enacted. From modest beginnings in 1967, the Act has