

Ground Water Monitoring Review, Editor: Jay H. Lehr, Water Well Journal Publishing Co., 500 West Wilson Bridge Road, Worthington, Ohio 43085, quarterly, Annual subscription: \$15 (U.S.A.) or \$26 (elsewhere)

Two of the present "high visibility" environmental concerns in the United States are the protection of drinking water and the disposal of hazardous waste. Each has been addressed separately by the U.S. Congress that passed the Safe Drinking Water Act and the Resource Conservation and Recovery Act (RCRA) but they are interrelated concerns, for one of the key provisions of RCRA is the installation of monitoring wells to detect movement into the ground water of pollutants from hazardous waste disposal sites. Both of these laws look to the future, but a newly enacted law, "Superfund", looks to the past and addresses the remedial actions needed to clean up old, hazardous waste sites that pose a threat to water supplies and the environment.

Informed sources estimate that as a result of these concerns and laws, 500,000 monitoring wells will be drilled in the next five years. This new quarterly journal is dedicated to assisting those engaged in the operation and to present to them the latest technology in ground-water monitoring. The first issue (Vol. 1, No. 1) appeared in May 1981 and contains articles entitled: (1) Introduction to ground-water monitoring, (2) Guidelines for developing a statewide ground-water monitoring program, (3) Ground-water monitoring requirements of RCRA, (4) Monitoring in the saturation zone, (5) Recommended sampling procedures for monitoring wells, (6) A multi-level device for ground-water sampling, (7) Air-lift samplers for zone of saturation monitoring, (8) Erosion interpretation of ground-water level data, and (9) Confidence in ground-water monitoring.

Articles will be refereed by the editorial board composed of experts working in the field.

GARY F. BENNETT

1. *Dow's Fire and Explosion Index Hazard Classification Guide*, American Institute of Chemical Engineers, New York, 5th edition, 1981, 57 pp., \$10 (Member), \$20 (Other).
2. *Fundamentals of Fire and Explosion*, by D.C. Stull, American Institute of Chemical Engineers, New York, 1976, 122 pp., \$8 (Member), \$16 (Other).

Two books, one old and one new, published by AIChE, both written at Dow Chemical Company, Midland, Michigan, deal with the fire and explosion hazards facing chemical plants. The first listed book is the fifth edition of a guide issued first in 1964. Utilizing the learning experience gained in the past 16 years, the revised fifth edition contains a new format for Risk Evaluation of a Process plant. The book liberally uses tables, plots and

“fill in blank charts” to assist the engineer in performing the risk insurance analysis program.

The second (and earlier) book by Stull is a more fundamental study of the theoretical and practical basis of chemical fire and explosion technology.

Stull has presented a comprehensive and well-written booklet that deals with the fundamental thermodynamics and kinetics of uncontrolled chemical reactions. To this reviewer, the material appears to be the result of a course (and if it is not, it would make a good one) as the material has a flow that comes from an integrated lecture series.

There are numerous figures, equations, diagrams and plots used by Stull to illustrate important points. This they do well, and their quantity and quality adds much to the book. The only negative aspect is that some of the figures are handwritten and some typewritten; for the sake of uniformity, it would have been better to have all the same.

Major chapters of the book include: thermochemistry, kinetic chemistry, ignition, flames, dust explosions, thermal explosions, gas phase detonations, condensed phase detonations, evaluating reactivity hazard potential, blast effects, fragments and craters and protection against explosion.

GARY F. BENNETT

Oil Spill Cleanup and Protection Techniques for Shoreline and Marshland,
by A. Breuel, Noyes Data Corporation, Park Ridge, New Jersey, 1981, 404
pp. \$42.

The United States Federal Government is the world's largest publisher, but much of their material, the results of contractor reports for the United States Environmental Protection Agency, goes unused because it is not well advertised. Noyes Data Corporation has consistently scrutinized the governmental literature, constantly combining and reprinting reports and putting books on the regular library shelves, which seem to be more accessible than the government documents section of most libraries.

This book is one such collection of these reports to the U.S. EPA Research Development Office for Oil and Hazardous Spills in Edison, New Jersey.

- (1) C. Foget, E. Schrier, M. Cramer and R. Castle
“Manual of Practice for Protection and Cleanup of Shorelines”
Volume 1. Decision Guide — EPA 600/7-79 - 187a
Volume 2. Implementation Guide — EPA 600/7-79 - 187b
- (2) D.J. Maiero, R.W. Castle and O.L. Crain
“Protection, Cleanup and Restoration of Salt Marshes Endangered by Oil Spills — A Procedure Manual” — EPA 600/7-78-220
- (3) J.D. Byroade, A.M. Twedell and J.P. LeBoff
“Handbook for Oil Spill Protection and Cleanup Priorities”