

The book ends with four appendices which are lists of hazardous chemical regulatory chemicals as defined by the various laws.

G.F. Bennett

Environmental Chemistry of Dyes and Pigments, A. Reife and H.S. Freeman (Eds.), Wiley, New York, NY, 1995, \$99.00, 329 pp, ISBN: 0-471-5892-6

Environmental control regulations are pervasive, affecting every industry; the manufacture no exception. Thus the editors and use of synthetic colorants is collected 13 chapters in an attempt to comprehensively address the problems posed by environmental regulation and discuss solutions to them.

The chapters span a wide variety of topics concentrating mainly on wastewater. The treatment processes discussed are the commonplace ones, i.e. filtration, aerobic/anaerobic biological treatment and powdered activated carbon (PACT) processes. But newer processes such as ozonation was discussed, but, in my opinion, all too briefly, for its potential application. conversely, the PACT® process received almost 100 pages of text (too many, in my opinion).

By title, the 13 chapters are:

1. Carbon adsorption of dyes and selected intermediates
2. Sodium borohydride dye reduction in wastewater
3. Ozonation
4. Use of electrochemical technology to remove color and other contaminants from textile mill effluents
5. Chemical pretreatment and aerobic-anaerobic degradation of textile dye wastewater
6. The PACT® system for wastewater treatment
7. Operating experience with the PACT® system
8. Reduction of textile wastewater using automatic process control, recycle, and filtration
9. Membrane filtration techniques in dyestuff recovery
10. Chemical removal of phosphate ions from disperse dye filtrates
11. Mass spectrometry in the analysis of dyes in wastewater
12. U.S. safety, health, and environmental regulatory affairs for dyes and pigments
13. Regulatory affairs (international perspective)

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Proceedings of the Nineteenth Arctic and Marine Oil spill Program (AMOP) Technical Seminar, Calgary, Alberta, Canada, Environment Canada, Ottawa, Ont., Canada, 1996, 2 Volumes, 1635pp

Environment Canada has a keen interest in the Arctic and the potential impact of oil spills thereon. This agency has conducted much of the key research on this area of

potential environmental impact. The numerous papers presented by that agency at this conference including one by a member of the *Journal of Hazardous Materials* editorial advisory board, M.E. Pingas, testify to that activity.

These two volumes constitute a substantial body of work and must, I believe, be most of the papers presented at the three-day seminar. The 97 papers are categorized under the following spill topics:

1. Physical and chemical properties and behavior
2. Activity updates and contingency planning
3. Containment and recovery
4. Countermeasures
5. Oil spill treating agents
6. Biological effects and degradation
7. Modelling
8. In-situ burning
9. Shoreline protection and cleanup
10. Detection, tracking and remote sensing
11. Site remediation
12. Kome/Taiga spills
13. Experimental spills in the North Sea
14. Recent spill experiences

Any review of a wide-ranging conference proceedings can only discuss the highlights of the conference – in this case the highlights are topics that piqued this reviewer's interest. I read about such topics as:

1. Development of a mathematical model to predict the ratio of evaporation of oil, based on distillation data.
2. Alyeska/Servs technical innovations for oil spill response –descriptions of numerous intriguing (innovative) responses unit are given.
3. OHMSETT - the National Oil Spill Response Test Facility – a very large test taken in New Jersey, formerly operated by the USEPA, closed a number of years ago and reopened by the U.S. Minerals Management Service in Aug. 1992. OHMSETT is a very large and valuable (and one the reviewer has visited) research facility that allows full-scale testing of oil removal/response equipment and techniques for the cleanup of oil spills.
4. Comprehensive review of oil spill combustion studies.
5. Drum emptying, cleanup and removal in the Northwest Territories.
6. Soil bioremediation.
7. Dispersant effectiveness.

Environment Canada is to be congratulated for its efforts in this area and for the completion and timeliness of the proceedings publication.

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