Ref. 676.042 IND 3rd ed.

CONTENTS

1. The Changing Environmental Paradigm	1
2. Impact of Water Pollutants on the Pulp and Paper Industry	7
3. Bioassessment of the Aquatic System	29
4. Mathematical Analysis of Water Pollution Effects on Lakes and Streams	65
5. Water Legislation	81
6. Pollution Prevention	103
7. Sampling and Conducting Mill Pollution Load Surveys	107
8. Pollution Prevention in Stock Preparation and Paper Machine Areas	125
9. Process Modifications in the Wood Yard	149
10. Pollution Prevention in Unbleached kraft Production	155
11. Process Modifications in Semichemical Pulping	179
12. Groundwood, RMP, and TMP Process Modification	195
13. Pulping and Bleaching Technologies for Improved Environmental Performance	ce 203
14. Minimum Impact Manufaturing in Bleached Kraft Mills	227
15. Pollution Prevention in Deinking Operations	249
16. Color and Organochloride Removal	273
17. Storm Water Management at an Industrial Site	301
18. Primary Treatment : Suspended Solids Removal	317
19. Secondary Aerobic Biological Treatment	331
20. Anaerobic Treatment of Pulp and Paper Mill Wastewater	369
21. Risk Analysis and Environmental Control	417
22. Management of Residuals	429
23. Groundwater Pollution control	457
24. Air Pollution : A Problem Without Boundaries	479
25. Air Pollution Legislation	487
26. Pulp and Paper Air Pollution Problems	501
27. Air Pollution Control Equipment and Strategies	537
28. Ambient Air Monitoring of Paper Industry Emissions	563
29. Stationary Source Sampling	575
30. Applications of Air Contaminant Dispersion Models	593
31. Acid Deposition and the Forest Industry	607
32. Sustainable Forestry	627
33. Environmental Management Systems	635
34. Ecological labels	641
35. Life Cycle Assessment of Product Systems	643