Handbook of Environmental Engineering 17

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Natural Resources and Control Processes

Springer

Natural Resources and Control Processes

- **Book Title:** Natural Resources and Control Processes
- **Editors:** Lawrence K. Wang, Mu-Hao Sung Wang, Yung-Tse Hung, Nazih K. Shammas
- **Series Title:** Handbook of Environmental Engineering, Volume 17
- **DOI:** https://doi.org/10.1007/978-3-319-26800-2
- **Publisher:** Springer Cham
- **Hardcover ISBN:** 978-3-319-26798-2 Published: 19 August 2016

Key-points:

- Serves as a practical reference for scientists, researchers, educators, and designers of water systems
- Provides a multi-approach understanding of environmental resources conservation
- Equips readers to handle complex problems associated with waste treatment systems including those generating radioactive and similar toxic wastes

Citation:

- Lawrence K. Wang, Mu-Hao Sung Wang, Yung-Tse Hung, Nazih K. Shammas (2016). Natural Resources and Control Processes, Springer , New York, NY, USA, 633 pages, **ISBN No.:** 978-3-319-26798-2; https://doi.org/10.1007/978-3-319-26800-2

Abstract

This edited book has been designed to serve as a natural resources engineering reference book as well as a supplemental textbook. This volume is part of the Handbook of Environmental Engineering (HEE) series, an incredible collection of methodologies that study the effects of pollution and waste in their three basic forms: gas, solid, and liquid. It complements two other books in the series including:

(1) *Environmental and Natural Resources Engineering* and
(2) *Integrated Natural Resources Management*

that both serve as a basis for advanced study or specialized investigation of the theory and analysis of various natural resources systems. This book (HEE17) covers the management of many waste sources including those from agricultural livestock, deep-wells, industries manufacturing dyes, and municipal solid waste incinerators. The purpose of this book is to thoroughly prepare the reader for understanding the sources, treatment and control methods of toxic wastes shown to have harmful effects on the environment. Chapters provide information on some of the most innovative and ground-breaking advances in waste characterization, control, treatment and management from a panel of esteemed experts.

Totally there are 11 chapters in this book: (1) Management of Livestock Wastes for Water Resource Protection; (2) Application of Natural Processes for Environmental Protection; (3) Proper Deep-Well Waste Disposal for Water Resources Protection; (4) Treatment and Management of Industrial Dye Wastewater for Water Resources Protection; (5) Health Effects and Control of Toxic Lead in the Environment; (6) Municipal and Industrial Wastewater Treatment Using Plastic Trickling Filters for BOD and Nutrient Removal; (7) Chlorides Removal for Recycling Fly Ash from Municipal Solid Waste Incinerator; (8) Recent Evaluation

of Early Radioactive Disposal Practice; (9) Recent Trends in the Evaluation of Cementitious Material in Radioactive Waste Disposal; (10) Extensive Monitoring System of Sediment Transport for Reservoir Sediment Management; and (11) Glossary of Land and Energy Resources Engineering.

Honors:

This book was among the "20 Best-Selling Natural Resources Books of All Time" (ranked by the BookAuthority) in 2018. Today in 2024, this book is still ranked "No 68 Best-Selling Natural Resources Books of All Time" and "No. 56 Best Environmental Engineering Books of All Time" (both ranked by the BookAuthority)

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Keywords

- Natural resources
- Industrial dye wastes
- Agricultural livestock waste
- Radioactive waste disposal
- Water resources protection
- Toxic lead
- Municipal solid waste
- water industry and water technology
- water quality and water pollution

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Bibliographic Information

- **Book Title:** Natural Resources and Control Processes
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- **Publisher:** Springer Cham
- **eBook Packages:** Engineering, Engineering (R0)

- **Hardcover ISBN:** 978-3-319-26798-2 Published: 19 August 2016
- **Softcover ISBN:** 978-3-319-80017-2 Published: 22 April 2018
- **eBook ISBN:** 978-3-319-26800-2 Published: 10 August 2016
- **Series ISSN:** 2512-1359
- **Series E-ISSN:** 2512-1472
- **Edition Number:** 1
- **Number of Page:** XII, 633
- **Number of Illustrations:** 83 b/w illustrations, 56 illustrations in colour
- **Topics:** Wastewater Management, Wastewater Technology, Environmental Engineering/Biotechnology, Water Industry/Water Technologies, Environmental Science and Engineering, Waste Water Technology / Water Pollution Control / Water Management / Aquatic Pollution, Environmental Chemistry