Building on the first principles of environmental chemistry, engineering, and ecology, this volume fills the need for an advanced textbook introducing the modern, integrated environmental management approach, with a view towards long-term sustainability and within the framework of international regulations.

As such, it presents the classic technologies alongside innovative ones that are just now coming into widespread use, such as photochemical technologies and carbon dioxide sequestration. Numerous case studies from the fields of air, water and soil engineering describe real-life solutions to problems in pollution prevention and remediation, as an aid to practicing professional skills.

With its tabulated data, comprehensive list of further reading, and a glossary of terms, this book doubles as a reference for environmental engineers and consultants.