

1. Record Nr.	UNINA9910797392103321
Titolo	Wastewater and shale formation development : risks, mitigation, and regulation / / edited by Sheila Olmstead, PhD
Pubbl/distr/stampa	Oakville, Ontario : , : Apple Academic Press, , [2016] ©2016
ISBN	0-429-15486-0 1-77188-161-5
Descrizione fisica	1 online resource (286 p.)
Disciplina	628.1/6833 628.16833
Soggetti	Oil pollution of groundwater Oil pollution of water Hydraulic fracturing - Environmental aspects Water - Pollution
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Cover; About the Editor; Contents; Acknowledgment and How to Cite; List of Contributors; Introduction; Part I: Water Use and Wastewater Production in Shale Gas Development; Chapter 1: Source and Fate of Hydraulic Fracturing Water in the Barnett Shale: A Historical Perspective; Chapter 2: The Fate of Injected Water in Shale Formations; Chapter 3: Spatial and Temporal Correlation of Water Quality Parameters of Produced Waters from Devonian-Age Shale following Hydraulic Fracturing; Part II: Potential Environmental Effects of Fracking Wastewater Chapter 4: Shale Gas Development Impacts on Surface Water Quality in Pennsylvania Chapter 5: Geochemical and Isotopic Variations in Shallow Groundwater in Areas of the Fayetteville Shale Development, North-Central Arkansas; Chapter 6: Radionuclides in Fracking Wastewater: Managing a Toxic Blend; Part III: The Quest for Mitigation; Chapter 7: Optimal Well Design for Enhanced Stimulation Fluids Recovery and Flowback Treatment in the Marcellus Shale Gas Development using Integrated Technologies

Chapter 8: Co-Precipitation of Radium with Barium and Strontium Sulfate and Its Impact on the Fate of Radium during Treatment of Produced Water from Unconventional Gas ExtractionPart IV: Fracking Wastewater Regulations; Chapter 9: Regulation of Water Pollution from Hydraulic Fracturing in Horizontally-Drilled Wells in the Marcellus Shale Region, USA; Chapter 10: Excerpt from: Reflecting Risk: Chemical Disclosure and Hydraulic Fracturing; Chapter 11: Hydraulic Fracturing: Paving the Way for a Sustainable Future?; Author Notes

Sommario/riassunto

The number of tight oil and shale gas wells continues to rise primarily in the US, but also worldwide. The US has vast reserves of oil and natural gas, which now are commercially reachable as a result of advances in horizontal drilling and hydraulic fracturing technologies. But as hydraulic fracturing is increasingly used, concerns have been raised about potential stress on surface water and groundwater supplies from the withdrawal of water used in the process. Equally important is the growing volume of wastewater generated from hydraulically fractured oil and gas wells, requiring recycling, t
