Record Nr. UNINA9910809843003321 Marcellus Shale and shale gas [[electronic resource]]: facts and **Titolo** considerations / / Gabriel L. Navarro, editor Pubbl/distr/stampa Hauppauge, N.Y.,: Nova Science Publishers, c2011 **ISBN** 1-61470-298-5 Edizione [1st ed.] Descrizione fisica 1 online resource (179 p.) Collana Earth sciences in the 21st century Gases - characteristics, types and properties Altri autori (Persone) NavarroGabriel L Disciplina 622/.3381 Soggetti Shale gas reservoirs - New York (State) - Marcellus Region Marcellus Shale 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 and index. Nota di contenuto Intro -- MARCELLUS SHALE AND SHALE GAS: FACTS AND CONSIDERATIONS -- MARCELLUS SHALE AND SHALE GAS: FACTS AND CONSIDERATIONS -- CONTENTS -- PREFACE -- Chapter 1 WATER RESOURCES AND NATURAL GAS PRODUCTION FROM THE MARCELLUS SHALE\* -- Introduction -- What is the Marcellus Shale? -- Why is the Marcellus Shale an Important Gas Resource? -- Why is the Marcellus Shale Being Developed Now? -- What are the Water-Resource Concerns About Developing Natural Gas Wells in the Marcellus Shale? -- Water Supply -- Transporting Fluids and Supplies -- Wastewater Disposal --Summary -- References -- Chapter 2 WATER MANAGEMENT TECHNOLOGIES USED BY MARCELLUS SHALE GAS PRODUCERS\* --Disclaimer -- Introduction -- Shale Gas Resources in the United States -- Technologies that Enable Shale Gas Production -- DOE/NETL Research Program -- Water Issues Associated with Shale Gas

Production -- Stormwater Runoff from Disturbed Areas -- Water Supply

Technologies Used in the Marcellus Shale -- Data Collection Approach -- Underground Injection -- Discharge to Surface Water Body -- Haul to POTWs -- Haul to Commercial Industrial Wastewater Treatment Plant -- Reuse for a Future Frac Job -- Results from Operator Survey -- Site

for Drilling and to Make up Frac Fluids -- Management of Water Flowing to the Surface from the Well -- Water Management

Visits to Commercial Wastewater Disposal Facilities -- Eureka

Resources -- Pennsylvania Brine -- Tunnelton Liquids -- Hart Resource Technologies -- Findings and Conclusions -- Findings -- Conclusions -- References -- Appendix A: Pennsylvania Facilities Permitted to Accept Oil and Gas Wastewaters and Other Facilities that Have Applied for Permits to Accept Oil and Gas Wastewater -- End Notes -- Chapter 3 NATURAL GAS DRILLING IN THE MARCELLUS SHALE NPDES PROGRAM FREQUENTLY ASKED QUESTIONS\* -- General Note -- End Notes. Chapter 4 IMPACT OF THE MARCELLUS SHALE GAS PLAY ON CURRENT AND FUTURE CCS ACTIVITIES\* -- Disclaimer -- 1.0. Introduction --Scope -- 2.0. Marcellus Shale Basic Geology - Location and Extent --2.1. Depth, Thickness, and Gas Production Potential -- 2.2. Stratigraphic Units above the Marcellus Shale -- 2.3. Stratigraphic Units below the Marcellus Shale -- Tioga Ash Bed -- Onondaga Limestone --Huntersville Chert and Needmore Shale -- Oriskany Sandstone --Rochester Shale -- Keefer Sandstone -- Rose Hill Shale -- Tuscarora Sandstone -- 2.4. Potential Impact on CCS Storage -- 3.0. Extraction Techniques -- 3.1. Well Development/Stimulation -- 3.2. Well Spacing and Placement -- 4.0. Technical Feasibility for Application of CCS Technology -- 4.1. Marcellus as a Geologic Storage Target Formation -- 4.2. Potential Risk Associated with Existing Wells -- 4.3. Summary -Technical Considerations for Geologic Sequestration Near the Marcellus -- 5.0. Other Shale Gas Basins -- 5.1. Other Selected US Shale Gas Areas -- 6.0. Infrastructure Concerns -- 7.0. Conclusion and Recommendations -- References -- Chapter 5 SHALE GAS: APPLY TECHNOLOGY TO SOLVE AMERICA'S ENERGY CHALLENGES\* -- The Resource -- Where Shale Gas Comes from -- History of Development -- Production Trend -- What It Means for Us -- The Technology --How It Works -- Hydraulic Fracturing -- NETL's Early Contributions --What's Next -- What DOE Is Doing Now -- Where to Find out More --INDEX.