Record Nr. UNINA9910760301003321 Autore Chidiac Cassandra Titolo Passive Treatments for Mine Drainage: A Guide for Early Researchers / / by Cassandra Chidiac, Aaron Bleasdale-Pollowy, Andrew Holmes, Frank Gu Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2024 3-031-32049-2 ISBN Edizione [1st ed. 2024.] Descrizione fisica 1 online resource (144 pages) Collana SpringerBriefs in Applied Sciences and Technology, , 2191-5318 Altri autori (Persone) Bleasdale-PollowyAaron HolmesAndrew GuFrank 622 Disciplina 622.5 Soggetti Mining engineering Sedimentology Geology Cogeneration of electric power and heat Fossil fuels Mining and Exploration Fossil Fuel Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Chapter 1. Introduction -- Chapter 2. Acid Mine Drainage Prevention --Nota di contenuto Chapter 3. In-Situ Remedies -- Chapter 4. Ex-Situ Remedies --Chapter 5. Recommendations And Challenges -- Chapter 6. Outlook. Sommario/riassunto This book provides the latest knowledge and advances in mine drainage, an increasingly important field due to its environmental and economic importance. The book contains a comprehensive overview of the most promising current passive treatments for mine drainage. Specifically, this book methodically explores recent literature of passive treatment research and classifies them as source control, in situ, and

> ex situ solutions. Each type of technology is discussed in terms of mechanisms, applicability, advantages, disadvantages, current

research, and trends in the field. This work emphasizes the comprehensiveness of the entire field, offering researchers and policymakers a guide for reference, research ideas, understanding, and application of each technology. It further discusses recent trends in the material selection of passive treatment applications, and largely the use of industrial waste and by-products to incorporate more sustainable practices for mine drainage remediation.