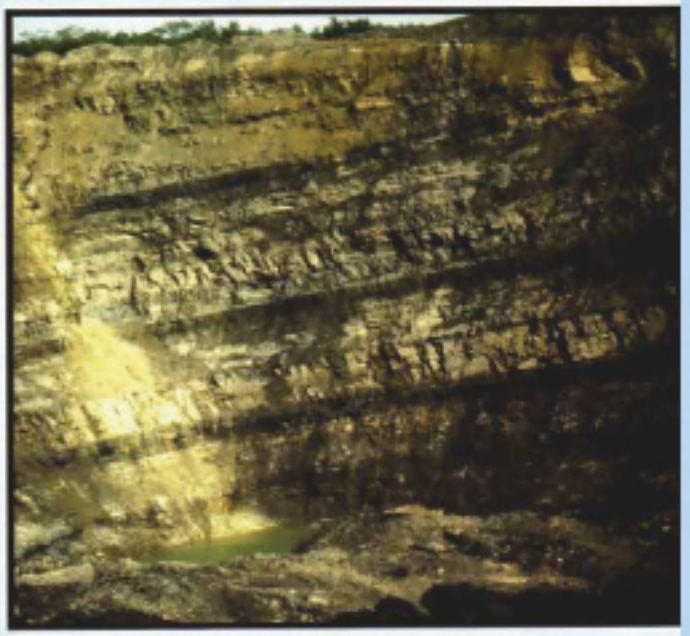
Prediction of Water Quality at Surface Coal Mines



Prepared by Members of the Prediction Workgroup of the Acid Drainage Technology Initiative (ADTI)

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Edited by
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DISCLAIMER

The technologies described in this book for the control and treatment of acid mine drainage are for information purposes only. None of the technologies described herein, companies mentioned, nor any brand names used are endorsed by the U.S. Office of Interior/Office of Surface Mining, the National Mine Land Reclamation Center, the National Research Center for Coal and Energy, West Virginia University, or any of their affiliates.

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Preface

This report presents the principal techniques and methods used to predict the water quality that will result from surface coal mining and reclamation. It has been prepared by a subset of the Coal Sector of the Acid Drainage Technology Initiative (ADTI), which in turn is a coalition of State and Federal agencies, industry, academia, and consulting firms working together to promote communications and technology enhancement in the field of acid drainage. The ADTI Coal Prediction Workgroup was initiated by the Office of Surface Mining (OSM), National Mining Association (NMA), the Interstate Mining Compact Commission (IMCC), and the National Mine Land Reclamation Center (NMLRC), which coordinates and facilitates ADTI activities. The ADTI Coal Prediction Workgroup has had a number of members over the years since it began work in 1996. It is with deep gratitude that the ADTI coal sector acknowledges the voluntary contributions of the authors, researchers, editors, and their employers that have made this document possible. However, in addition, the efforts of all the members of the Workgroup, and the agencies, companies and universities that allowed them to work on ADTI, are gratefully acknowledged:

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This report summarizes some of the more recent advances in understanding and experience in the field of mine drainage prediction as well as some previously unpublished experiences in coal mine drainage prediction. It is intended to provide a balanced and moderately detailed overview of coal mine drainage prediction and to serve as a guide to the literature of this rather broad field. Contact information for all of the authors can be found at the end of the book, in Appendix C.