

Emergency Contract EP 3555440000-05-01; OSM 63(1441)101.1
McDonald South; Nickle Plate Mine "Blowout"
McDonald Borough, Washington & Allegheny Counties
Robinson Township, Washington County
North Fayette Township, Allegheny County
Pennsylvania

Final Report
June 30, 2005
EIS, LLC
1800120

NARRATIVE

The Narrative has been provided to describe the problem, the approach, and the solution. The roles of the various partners have been briefly identified including the peer review for the effort.

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PHOTOS

The Photos provided have been selected from a photographic log depicting site conditions and activities. These photographs illustrate only a few of the project highlights.

SITE PLAN & "AS-BUILTS"

The Site Plan, provided as a base map for the project, includes an index to recent and historical drill holes, test pits, and permanent facilities constructed for the project. The "As-Builts", including plan views and sections, have been provided to describe the Early Warning System, Secondary Drain, and Primary Drain as installed during this project.

APPENDIX A

SITE INFORMATION

The 1897 artist's rendering of McDonald, PA was compared to the Site Overview Map depicting McDonald Borough over a century later to aid in identifying the location of the main entry of the Nickle Plate Mine as well as other cultural features.

APPENDIX B

GEOLOGY AND HYDROGEOLOGY

Information from previous drilling programs conducted by the PA DEP BAMR and their predecessors as well as from the US Office of Surface Mining was compiled, supplemented, and integrated with current data collected as provided in the Geologic Drill Hole Logs & Piezometer "As-Builts" to construct a Generalized Columnar Section and Geologic Cross-Section. Interpretive maps including a Bed Map depicting the attitude at the base of the Pittsburgh coalbed and the Mine Pool Response Test depicting the reaction of the mine pool during cessation of pumping at the "blowout" have been included as overlays to the Site Plan. As the location of the mine workings are subject to interpretation, an Underground Mine Map has also been provided as an overlay. Water sample analyses depict the variability in quality of the mine pool. A table, Water Level Monitoring, compiles BAMR weekday measurements to depict fluctuations in mine pool elevation.

APPENDIX C

CONCEPTUAL OPTIONS

The Conceptual Design Options plan has been provided as a location map for the options considered and presented to BAMR for the permanent solution during this project.

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APPENDIX D

COMPUTER DISK

MCDONALD SOUTH PROJECT DATA

The Final Report as well as historical data provided by BAMR, news items, and additional photographs have been compiled and included on this computer disk.