Coal Mining Services

Introduction

Tetra Tech understands the regulations and issues affecting the coal and energy mining sectors. Today, coal mining is under intense scrutiny for its effect on health, safety, and the environment. Around the world, industry stakeholders are using advances in legislation and standards, mine engineering practices, training standards, operating practices, and extraction technologies to address the challenges of the industry.

Our professionals have worked with a variety of mining operations worldwide, including underground and surface coal mining, and surface and underground energy mines operations, including coal washing and energy mineral milling and leaching operations. Tetra Tech’s staff has more than 25 years of both feasibility-level and in-pit experience developing new coal operations and expanding existing coal and energy metals mining operations.

Specialized Coal Mining Services

Tetra Tech has provided environmental and engineering services to energy and mining clients for almost 50 years. Tetra Tech’s professionals have particular expertise in technical disciplines including mining and civil engineering, hydrology, hydrogeology, geotechnical rock mechanics, air quality, soil science, botany, wildlife biology, fisheries, and land use planning.

We provide a variety of services applicable specifically to coal mining operations, including:

- Geologic reserve estimates
- Due diligence
- Mine planning and design
- Operations consulting
- Contract mining
- Coal mine methane degasification
- Carbon credits system initialization
- Baseline environmental investigations and interim monitoring
- Regulatory compliance consulting
- Environmental impact assessments and statements
- Reclamation planning and design
- Abandoned mine lands management and reclamation
- Permitting assistance
- Bond release advocacy and strategies
- Air modeling, permitting, and compliance
- Methane degasification and utilization
- Coal liquefaction and gasification
- Shale gas exploration
- Hydrology and hydrogeology, water treatment
- Subsidence engineering
- Refuse disposal

Service Highlights

Coal Processing

- Coal processing engineers with seniority and experience in the world's best coal mines
- Understanding of the requirements for safe, productive, and profitable coal processing
- Capability and experience to fully evaluate coal to gas and liquids, and coal water slurry technologies, for high-grade thermal coal deposits

Water Management

- Long history and wide knowledge base of all aspects of water management in coal mining
- Strong relationships with regulators and industry players
- Skill base with numerous water management specialists, such as hydrologists, hydrogeologists, and wastewater treatment experts
- Groundwater engineering services ranging from baseline characterization to final design of mining groundwater management facilities
- Staff experienced in providing testimony at public hearings and court proceedings
Tetra Tech is a leading provider of consulting, engineering, program management, construction management, and technical services. The Company supports government and commercial clients by providing innovative solutions to complex problems focused on water, environment, energy, infrastructure, and resource management. With 13,000 employees worldwide, Tetra Tech’s capabilities span the entire project life cycle.

Global Project Locations

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Top Coal-producing Regions
Experience in regions with world’s leading coal reserves: 19 U.S. states, China, Russia, India, and Central Asia

Full Mine Life Cycle Services
From resource estimation, to and abandoned mine lands management, and every stage in between

World’s Top Producers as Clients
Arch Coal, BHP Billiton Limited, Kennecott Energy, Peabody Western Coal Company, Rio Tinto Energy America, and Peak Energy

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