1.0 INTRODUCTION

Mountain Coal Company, LLC (MCC) operates West Elk Mine, an underground coal mine, on Federal and fee coal leases located in Gunnison and Delta Counties, Colorado, two miles east of Somerset, Colorado (Figure 1). The lease block locations are shown on Map 1. The lease blocks are in Townships 13 and 14 South, Ranges 90 and 91 West, 6th PM. Mountain Coal Company, LLC, a Delaware Limited Liability Company established in March 1998, is owned 100% by Arch Western Bituminous Group, LLC, which is owned 100% by Arch Western Resources, LLC. Arch Western Resources, LLC is owned 99.5% by Arch Western Acquisition Corporation and 0.5% by Arch Western Acquisition, LLC, which is owned 100% by Arch Western Acquisition Corporation. Arch Western Acquisition Corporation is owned 100% by Arch Resources, Inc. (formerly known as Arch Coal, Inc.)

Operations at West Elk Mine have been conducted under several different names in the past. Before 1991, West Elk Mine itself was known as the Mt. Gunnison No.1 Mine. Since the mine opened, operations were conducted under the following names: Anaconda Minerals Company, ARCO Coal Company (a Division of Atlantic Richfield Company), West Elk Coal Company, Inc., Arch Coal, Inc. and Mountain Coal Company. Many of the discussions, maps and exhibits included in this document still reflect the other mine and company names. All the names are to be considered synonymous with West Elk Mine and Mountain Coal Company, LLC.

When the original permit document was prepared, operations focused in the F Seam. However, references to the F Seam resources and facilities throughout this application may also apply to the E and B Seam resources and facilities.

Construction of West Elk Mine began in 1981. The mine began producing coal from the F Seam in January 1982, from the B Seam in 1990, and from the E Seam in 2004. Construction of facilities has been on-going to meet production needs.

Construction of the Sylvester Gulch Facilities Area, including ventilation shafts, mine ventilation fans, an electrical substation, new and upgraded roads, powerlines and support facilities, began in the Spring of 1997. These facilities provide the increased power, access, and ventilation requirements necessary to sustain underground mining operations.

West Elk Mine was originally envisioned to grow to 2.8 million tons per year production from the F-Seam room and pillar operations. Soft market conditions slowed this expansion during the late 1980's and the mine produced approximately 0.5 million tons per year from the F Seam room and pillar operations during this term. After longwall operations were established in the B Seam in 1992, production increased to over 1.4 million tons per year and is planned to reach 8.2 million tons of clean coal per year.

To allow MCC to remain competitive under current market conditions, expansion into the E and B Seams, was completed. These seams have high productivity capabilities with longwall technology. Room and Pillar mining operations with continuous miners cannot compete with longwall mining operations. Coal height and other conditions in the F Seam are not conducive to longwall mining. The E and B Seams are, however, well suited to longwall mining methods.

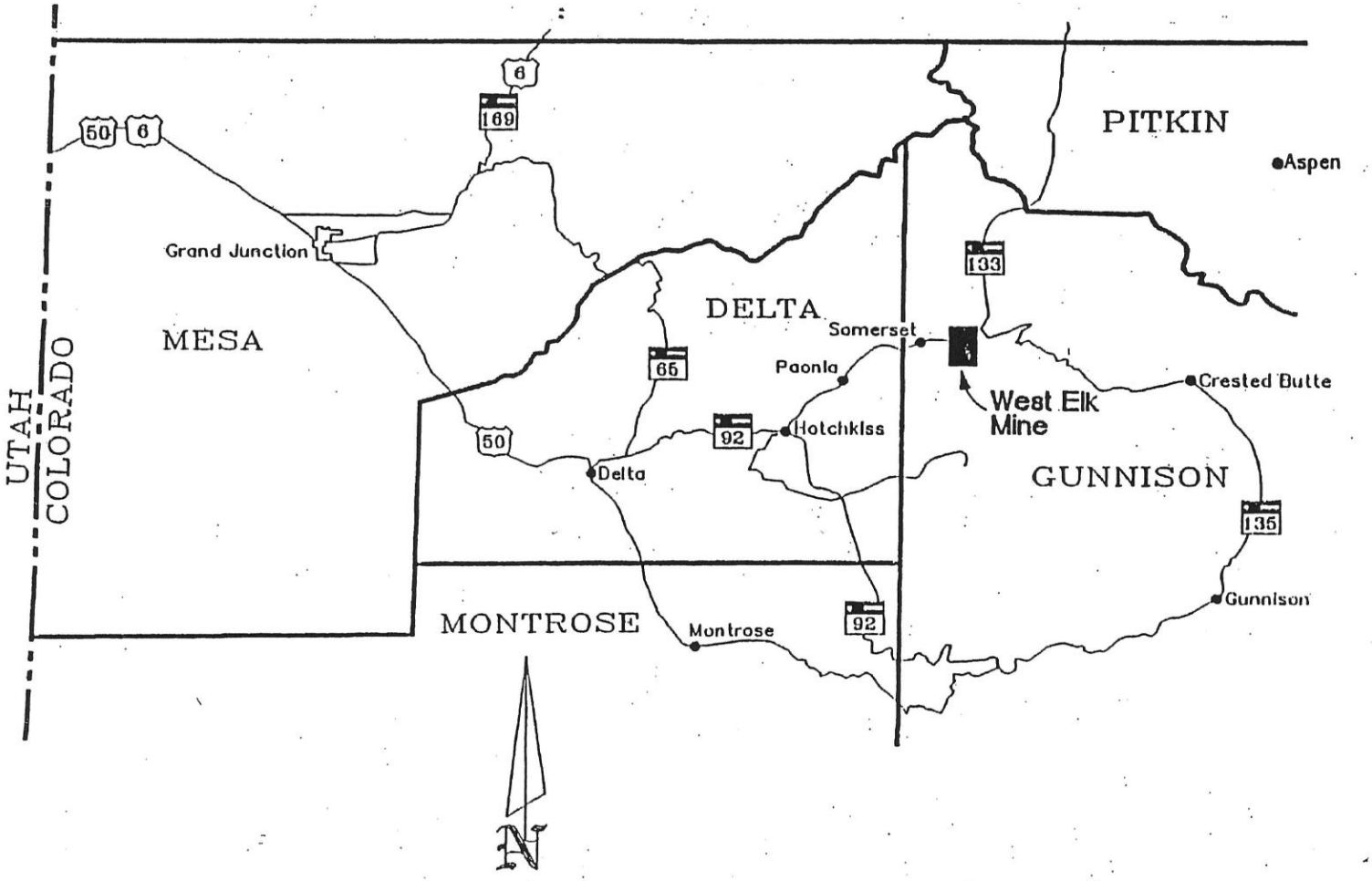

Figure 1, General Location of West Elk Mine

The F Seam operations at West Elk Mine involved the room and pillar type mining method, which utilized continuous miners, diesel face haulage, and electric roof bolters. This type of equipment was the best suited for the conditions of the F Seam panels. The longwall mining method is utilized in the B Seam and the E Seam. Panels are developed using continuous miner sections of equipment. Depending on market conditions, two longwalls could be operated in these seams. Most coal mined at West Elk Mine is marketed and shipped as crushed and screened run-of-mine coal. Some coal is washed in a coal preparation plant to improve coal quality.

The major surface disturbance at West Elk Mine is the main facilities area, including the portals, coal handling facilities, support buildings, and refuse disposal areas, mine ventilation borehole pads and roads, and the Sylvester Gulch Facilities Area. Since the mine is an underground mine, the surface disturbance (approximately 560 acres total at present) is small compared to the permit area (approximately 19,855 acres with PR15) and the life of mine affected area (approximately 15,938 acres).

Some additional surface disturbance may occur in the future for ventilation, dewatering, and mine ventilation borehole installations, refuse disposal, and other facilities necessary for continued mine operations. Changes to the coal handling facilities required for the increased longwall production included upgrading the run-of-mine conveyor belt to 60 inches wide, adding dual crushers and a screening circuit at the breaker building, relocating the main haul road and water treatment plant, and adding coal stockpile stacking tubes with underground reclaim systems. Descriptions of these facilities may be found in Section 2.05. The surface facilities will be reclaimed at the end of mining operations as later described.

For the purposes of this application, the following terms are used in the document as defined below:

1. Mine Plan Area (Boundary): Means the area of land and water within the boundaries of all permit areas during the entire life of the coal mining and reclamation operations. It includes all areas that are or will be affected during the entire life of those operations.

2. Coal Lease Area (Boundary): Means the area of land and water within the boundaries of all permit areas during the entire life of the coal mining operations that overlie Federal coal leases and privately owned coal, but which do not necessarily include lands disturbed by surface operations in the permit area. This area is shown on Map 1.

3. Permit Area (Boundary): Means the area of land and water within the boundaries of the permit designated on Map 1, Map 1A, and described in Exhibit 2A. All areas that will be affected by coal mining and reclamation operations during the five-year term of the permit or longer are included.

4. Environmental Study Area (Boundary): Means an area, as delineated on Map 3, that extends approximately one mile outside the permit boundary and mine plan boundary to encompass all drainages and vegetation types on the property. A Riparian Area Protection Zone is depicted on the map to show where surface occupancy cannot occur on Raven Creek.

5. Adjacent Area: Means land located outside the permit area, mine plan area, and coal lease area where air, water, wildlife, and other resources may be affected by coal mining and reclamation operations. For surface owners descriptions, adjacent lands mean next immediately adjacent landowner. The adjacent area here defined is within the Environmental Study Area.

Organization of this Permit Document

This permit document is organized to generally correspond with the *Regulations of the Colorado Mined Land Reclamation Board for Coal Mining*. It includes information as required under Rules:

- 2.03, Legal and Financial Information
- 2.04, Environmental Resources
- 2.05, Application for Permit for Surface or Underground Mining Activities - Minimum Requirements for Operation and Reclamation Plans
- 2.06, Requirements for Permits for Special Categories of Mining
- 3, Performance Bond Requirements
- 4, Performance Standards

The requirements of Rules 3 and 4 have been incorporated into the appropriate discussions contained in Rule 2. Also, supplemental information not included in the text of the document is provided in figures, tables, maps, and exhibits.