



0038

STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

ACT/015/009-88A  
file File #2

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March 1, 1988

TO: John Whitehead, Permit Supervisor

FROM: Pamela Grubaugh-Littig, Reclamation Engineer *pgl*  
Rick Smith, Geologist *RVS per pgl*

RE: Amendment to Conduct Second Mining East of Escarpment in Cottonwood Canyon, Beaver Creek Coal Company, Trail Mountain #9 Mine, ACT/015/009-88A, Emery County, Utah

Materials dated January 28, 1988, Plate 1 submitted February 10, 1988, and the reply to deficiency letter submitted February 22, 1988, were all reviewed for the above-identified amendment.

Proposed second mining is delineated on Plate 3-6 and will occur in Section 36 (State Lease ML-22603), approximately 800 feet south of Section 25. Second mining will be conducted beyond outcropping Castlegate Sandstone.

The overburden as shown on Plate 1 is from 1,200 to 1,300 feet thick above the proposed area of second mining. Room entries were originally driven on 80 foot centers and 60 x 60 foot square pillars were developed. Proposed second mining will result in either leaving 40 x 60 foot pillars or 47 x 60 foot pillars and maintenance of a minimum safety factor of 1.5 for the proposed pillar sizes at the given depths. Calculations (using three methodologies) indicate proposed pillars will be relatively stable and slowly crush over time.

The maximum extent of surface subsidence will be based on a 15 degree angle-of-draw, confined within a horizontal distance of 500 feet from the area of proposed second mining and will not affect USFS lands in Section 25.

Overburden thickness and the proposed development method suggest the area above second mining will be at relatively low risk for surface manifestations of subsidence (tension cracking, catastrophic failure) and accordingly, a relatively low risk is designated for potential impacts to renewable resource lands and other environmental resources.

It is herein recommended that the above-identified amendment be approved.

djh  
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