

UMC 782.17

Underground operations at the Emery Mine is an ongoing situation which does not occur in phases. The extent of the underground workings over the life of the permit is shown on Plates IV-1 and IV-2. The permit area encompasses approximately 5,408,060 acres.

It is anticipated that mining activities will continue considerably beyond the five (5) year permit term. This will require renewals at the end of each term.

UMC 782.18, UMC 800.60

Appendix I-5 contains a copy of the insurance certificate, for the Emery Mine, covering personal injury and property damage.

Revised 8-31-95
Revised 4/05

Section 22 T22S, R6E

Consolidation Coal Company
1800 Washington Road
Pittsburgh, Pennsylvania 15241

John & Vicki Byars
P.O. Box 575
Emery, Utah 84522

Kenneth L. & Earlene Christiansen
P.O. Box 552
Emery, Utah 84522

D.U. Company, Inc.
53 West Angelo Avenue
Salt Lake City, Utah 84115

Section 23 T22S, R6E

Consolidation Coal Company
1800 Washington Road
Pittsburgh, Pennsylvania 15241

Section 27 T22S, R6E

Consolidation Coal Company
1800 Washington Road
Pittsburgh, Pennsylvania 15241

Section 28 T22S, R6E

Wayne Staley
Emery, Utah 84522
(801) 286-2213

Glendon E. Johnson
1200 19th ST. NW Suite 500
Washington, DC 20036

Consolidation Coal Company
1800 Washington Road
Pittsburgh, Pennsylvania 15241

Section 29 T22S, R6E

George Olsen
15 E. Center
Orangeville, Utah 84537

Emery County
Emery County Courthouse
Castle Dale, Utah 84513

Refer to Page 7b thru 7d for
Exploration & Surface Agreement

Morgan Robertson
P.O. Box 65
Emery, Utah 84522

Glendon E. Johnson
1200 19th ST. NW Suite 500
Washington, DC 20036

Revised 10/2003

Revised 4/05

	SE $\frac{1}{4}$ SW $\frac{1}{4}$	Deed from Emery County to Kemmerer Coal Co. dated 5/14/68
	SW $\frac{1}{4}$ SE $\frac{1}{4}$	Deed from L.M. and S.M. Pratt to Kemmerer Coal Co. dated 6/22/49
	N $\frac{1}{2}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$	United States of America Not Leased
	W $\frac{1}{2}$ SW $\frac{1}{4}$	Emery County 95 E. Main Castledale, Utah 84513 (801) 748-2474
Section 20	NW $\frac{1}{4}$ SW $\frac{1}{4}$ S $\frac{1}{2}$ S $\frac{1}{2}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$	Lease from United States of America (BLM) to Kemmerer and Consol dated 7/1/70 (#U-5287)
	NE $\frac{1}{4}$ E $\frac{1}{2}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$	Deed from San Rafael Fuel Co. to Kemmerer Coal Co. date 10/1/58
	W $\frac{1}{2}$ NW $\frac{1}{4}$	United States of America Not Leased
Section 21	W $\frac{1}{2}$ SE $\frac{1}{4}$ W $\frac{1}{2}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$	Deed from San Rafael Fuel Co. to Kemmerer Coal Co.
	SE $\frac{1}{4}$ NE $\frac{1}{4}$	Deed from L.M. and S.M. Pratt to Kemmerer Coal Co.
Section 22	NW $\frac{1}{4}$ NW $\frac{1}{4}$	Deed from San Rafael Fuel Co. to Kemmerer Coal Co. dated 10/1/58
	SW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$	Deed from San Rafael Fuel Co. to Kemmerer Coal Co. dated 10/1/58
	SW $\frac{1}{4}$ NW $\frac{1}{4}$ N $\frac{1}{2}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$	Lease from United States of America (BLM) to Consol dated 7/1/83 (#U-50044)
	W $\frac{1}{2}$ SE $\frac{1}{4}$ E $\frac{1}{2}$ NW $\frac{1}{4}$ W $\frac{1}{2}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$	Deed from I. Browning to Kemmerer Coal Co. dated 8/23/66
Section 23	SW $\frac{1}{4}$ NW $\frac{1}{4}$	Deed from I. Browning to Kemmerer Coal Co. dated 8/23/66
	NW $\frac{1}{4}$ SW $\frac{1}{4}$	Deed from San Rafael Fuel Co. to Kemmerer Coal Co. dated 10/1/58

Section 27

S $\frac{1}{2}$ NW $\frac{1}{4}$ Deed from San Rafael Coal Co.
NW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ to Kemmerer Coal Co. dated 10/1/58

N $\frac{1}{2}$ NE $\frac{1}{4}$ Deed from L.M. and S.M. Pratt
to Kemmerer Coal Co. dated 6/22/49

	S $\frac{1}{2}$ NE $\frac{1}{4}$	Private ownership; Lorin Hunter 777 E. South Temple Salt Lake City, Utah 84102 (801) 328-2876	Was mistake: Deed from Kemmerer Coal Co.
Section 28	NW $\frac{1}{4}$	Deed from San Rafael Fuel Co. to Kemmerer Coal Co. dated 10/1/58	
	NE $\frac{1}{4}$	Dated from San Rafael Fuel Co. to Kemmerer Coal Co. dated 10/1/58	
	S $\frac{1}{2}$	Deed from San Rafael Fuel Co. to Kemmerer Coal Co. dated 10/1/58	
Section 29	NW $\frac{1}{4}$ NW $\frac{1}{4}$ E $\frac{1}{2}$ NW $\frac{1}{4}$ W $\frac{1}{2}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$	Lease from United States of America (BLM) to Kemmerer and Consol dated 7/1/70 (#U-5287)	
	Beginning 20 rods South of the NW corner of the SW Quarter of Section 29, thence South 60 rods, thence East 80 rods, thence North 20 rods, thence Northwesterly to the place of the beginning.	Lease from John and Carolyn Lewis to Consol and Kemmerer dated 11/12/80 1163 E. 25th Street Idaho Falls, ID 83401 (208) 522-3646	
	SW $\frac{1}{4}$ NW $\frac{1}{4}$, beginning at the NW corner of SW $\frac{1}{4}$, thence E 80 rods, thence S 76 rods, thence Northwesterly to the place of the beginning.	Lease from George Olsen to Consolidation Coal Co. dated 12/17/80 15 E. Center Orangeville, Utah (801) 748-2522	
	SE $\frac{1}{4}$ NE $\frac{1}{4}$	Lease from R.D. Jensen and D.R. Close to Consolidation Coal Co. dated 12/17/80 520 E. 1 N. Cleveland, Utah 84518 (801) 653-2252	
	NE $\frac{1}{4}$ NE $\frac{1}{4}$ E $\frac{1}{2}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$	Deed from San Rafael Fuel Co. to Kemmerer Coal Co. dated 10/1/58	
	S $\frac{1}{2}$ SW $\frac{1}{4}$	State of Utah Lease Relinquished by Consolidation Coal Co.	

Revised 6/98
Revised 4/05

CHAPTER IV ENGINEERING DESIGNS

IV.A UNDERGROUND MINE PLAN

This part covers the description of the underground mining operations to be conducted at the Emery Mine.

IV.A.1 UNDERGROUND MINE PLAN

UMC 783.12(a), 783.24(c), 783.25(e), 783.25(h), 784.11(a), 784.23(a)

The permit area for the Emery Mine encompasses approximately 5060,408 acres. The boundary of the permit area is shown on the Permit Boundaries and Bonding map Operations Plan Map (Plate IV-2III-9). The description of the permit area is as follows:

Township 22 South, Range 6 East

Section 19: S/2NE/4, SE/4, E/2SW/4

Section 20: S/2NE/4, SE/4NW/4, S/2

Section 21: S/2N/2, S/2

Section 22: SWE/4, SW/4, SE/4NW/4, NE/4

Section 23: SW/4NW/4, W/2SW/4

Section 27: W/2, NE/4

Section 28: All

Section 29: All

Section 30: E/2, E/2NW/4, SW/4NW/4, N/2NW/4SW/4, E/2SW/4

Section 31: N/2, W/2SW/4, E/2SE/4, SW/4SE/4

Section 32: All

Section 33: W/2NE/4

Mining operations at the Emery Mine are conducted in the IJ Zone utilizing the room and pillar mining method. Plate IV-1 shows the layout, the present mine workings and the projected areas to be mined during the permit term. The existing workings have been marked to show the extent of underground mining operations (1) before August 3, 1977, (2) between August 3, 1977 and May 3, 1978, and (3) after May 3, 1978 up to the permit approval date of January 5, 1986. There are no surface mining operations at the Emery Mine. The projected mine workings are delineated by year for the next five year permit term. Plate IV-2 shows the same plan on a 1"=1000' map to show the extent of the projected life of mine plan in the IJ Zone. The Emery Mine operates under the General Safety Orders, Utah Coal Mines issued by the Industrial Commission of Utah and the applicable regulations issued by the Mine Health and Safety Administration (MSHA).

Access to the underground workings is through the portals shown on Plate II-1. All of the present portals are drift openings at the outcrop of the seam. These openings consist of intake, return, and belt entries. It may be necessary in the future to install ventilation raises in other areas of the property; however, these locations are not known at the present time. Future portals may consist of ramp excavations and shafts to access the coal seam. The new ~~proposed~~ 4 East portal will use a ramp excavation down to the top of the IJ seam. A new set of portals will be installed for the southern main entries of the mine when production from the southern part of the mine warrants it.

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