

**OVERVIEW:
REGULATION OF COAL MINE SAFETY IN UTAH**

**SUMMARY OF HISTORY, CURRENT STATUS
AND COMPARISON WITH OTHER STATES**



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I. HISTORY OF UTAH COAL MINING¹

Relative to its vast coal resources, Utah's coal industry was slow to develop. During the initial phase of settlement, production was limited by labor and transportation. Coal was mined out of small prospects that served local markets.

The nature of coal mining changed when railroads pushed into Utah during the last third of the 19th century. Railroads themselves were large consumers of coal. They also provided the means to transport coal to distant markets. Together, these factors encouraged large-scale operations that exposed large numbers of workers to the dangers of underground coal mining. In 1900, only a few years after the commencement of large-scale mining operations, 200 Utah miners died in a coal mine at Winter Quarters—some from the initial explosion, others from the carbon monoxide poisoning that followed. The Winter Quarters disaster remains the worst but, sadly, not the last coal mine catastrophe in Utah.

As with most extractive industries, Utah's coal industry has experienced cycles of recession and prosperity. World War I, World War II, and the 1970's oil embargo increased demand for domestic energy resources and stimulated coal mining activity. In each case, these times of increased activity have been followed by periods of retrenchment. Currently, high demand for generation of electricity is encouraging greater coal production in Utah and elsewhere.

Despite the cyclical nature of the coal industry, the long-term trend of coal production in Utah has been upward. From 1960 through 2006, coal production has increased more than 500% while the numbers of mines and miners have declined.

Obviously, Utah’s robust coal production is the result of large mines using sophisticated equipment operated by highly skilled miners. It also requires the extraction of coal from more technically challenging deposits.

Table One: Historical data—coal mining in Utah²

Year	Mines	Miners	Average Days Worked/Year	Production (tons)	Tons per day/miner
1960	45	2,418	191	4,955,000	10.73
1965	31	1,495	212	4,992,000	15.75
1970	20	1,469	226	4,733,000	14.26
1975	20	2,550	197	6,937,000	13.81
1980	29	3,512	229	13,236,000	16.46
1985	22	2,563	213	12,831,000	23.50
1990	18	2,791	234	22,012,000	33.70
1995	14	1,989	225	25,051,000	55.98
2000	13	1,672	253	26,920,000	63.64
2005	13	1,803	300	24,556,000	45.40
2006	13	1,994	314	26,131,000	41.74

II. UTAH REGULATION OF COAL MINE SAFETY

State Coal Mine Inspector. Utah achieved Statehood in 1896. That same year, the first session of the Utah Legislature created the position of State Coal Mine Inspector.

The State Coal Mine Inspector was required to “make careful and thorough inspection” of every Utah coal mine every three months. The Inspector was specifically directed to examine “appliances for the safety of miners, the number of air and ventilation shafts, slopes, or tunnels, the number of shafts, slopes, or tunnels for ingress or egress, the character and condition of the machinery for operating, ventilating, and draining of such mines, and the quantity of air supplied to the same.”³

The State Coal Mine Inspector was authorized to enter and inspect any coal mine at any time. The Inspector was required to notify the mine operator of any unsafe conditions and to order correction of such conditions. If corrections were not made,

continued operation of the mine was unlawful. The Inspector was also authorized to obtain an injunction against operation of unsafe mines. Additionally, the Inspector was required to investigate and report on any coal mine accident. In performing the foregoing duties, the State Coal Mine Inspector was assisted by a Deputy Inspector and a support clerk.³

In subsequent years, the Utah Legislature expanded the scope of coal mine regulation under the authority of the State Coal Mine Inspector. In 1905, the Utah Legislature required the Inspector to certify the qualifications of individuals working as mine foremen and fire bosses. The Legislature periodically amended the statutes to add specific provisions for safe operation of coal mines.⁴

Utah Industrial Commission. In 1917, the Utah Legislature established the Utah Industrial Commission to administer laws dealing with employment conditions and labor relations. At the same time, the Legislature discontinued the office of State Coal Mine Inspector and transferred the Inspector's duties to the Industrial Commission.⁵

Transfer of administrative responsibility from the State Coal Mine Inspector to the Industrial Commission did not change the substance of Utah's coal mine safety standards. Rather, the Legislature maintained what had become a substantial statutory code of safety regulations, with only modest incremental amendments from time to time.

The full scope of Utah's statutory provisions for coal mine safety are found in Title 40, Chapter 2, "Coal Mines," Utah Code Annotated 1953, 1981 Replacement Vol. 5A, included herein as **Appendix A**. In summary, Utah's safety regulations and enforcement powers included:

- Industrial Commission's authority to enter any active coal mine at any time; refusal of entry could result in up to a \$500 fine.
- Obligation of mine operators to maintain accurate mapping of mine workings and provide reports regarding production, use of explosives, workforce data and number of accidents.
- Standards for safe egress from the mine.
- Obligation of mine operators to maintain "a constant and adequate supply of pure air," and setting standards to achieve that purpose.
- Obligation of mine operators to establish sprinkling systems for coal dust control.
- Timbering requirements.
- Provisions for certification of fitness for positions of mine foreman, fire boss and shot firer.
- Authority of the Industrial Commission to establish standards for various aspects of coal mining, such as definition of "gassy" mines and the design of lighting equipment to be used.
- Detailed statutory requirements for other operations, such as hoisting or lowering miners, prohibition against intoxication, storage of explosives, etc.
- In cases of accident, Industrial Commission authority to direct emergency operations and investigate the cause of accident.
- Enforcement powers, including monetary penalties, criminal misdemeanors and prohibitions against continued operation of non-compliant mines.

Thus, beginning with statehood and continuing to approximately 1980, the Utah Legislature maintained a comprehensive state program for coal mine safety that included

safety standards, procedures and enforcement tools, with administrative authority resting first with the State Coal Mine Inspector and later with the Industrial Commission.

III. ADVENT OF FEDERAL REGULATION⁶

The federal government was slow to participate in coal mine safety. The evolution of federal involvement took place over 100 years, in incremental steps:

- **1881**—Congress established minimal coal mine standards and prohibited employment of children under 12 years of age. These provisions applied only to coal mines in U.S. territories, including Utah Territory.
- **1910**—After a decade in which more than 2,000 miners had died annually in coal mine accidents, Congress established the Bureau of Mines, but limited its duties to research and gave it no enforcement authority.
- **1941**--The Bureau of Mines was given inspection authority.
- **1947**--Congress authorized the first code of federal regulations for mine safety.
- **1952**--Congress enacted the Federal Coal Mine Safety Act of 1952, which authorized annual federal inspections of some underground coal mines and gave the Bureau of Mines authority to issue violation notices, order mine closures in case of imminent danger, and assess civil penalties.
- **1966**--Congress extended the coverage of the 1952 Coal Mine Safety Act to all underground coal mines.
- **1969**—Congress enacted the Federal Coal Mine Health and Safety Act (“the Coal Act”), the first comprehensive federal legislation governing both surface and underground coal mines. The Coal Act required quarterly federal inspections of underground mines and dramatically increased federal enforcement powers. The

Coal Act also provided compensation for miners suffering from pneumoconiosis (“black lung”).

- **1973**—The Secretary of Interior established the Mining Enforcement and Safety Administration (“MESA”), separate from the Bureau of Mines, to assume the safety and health enforcement functions formerly carried out by the Bureau. This was done to avoid any conflict of interest between enforcement of mine safety and health standards on one hand, and mineral resource development on the other.
- **1977**—Congress enacted the Federal Mine Safety and Health Act of 1977. This Act created the Mine Safety and Health Administration (“MSHA”) with authority to develop and enforce coal mine safety standards. The 1977 Act expanded the rights of miners in safety matters and protected them from retaliation for exercising those rights.

Under the authority of the 1977 Federal Mine Safety and Health Act, MSHA administers a comprehensive federal scheme for: 1) establishing safety standards and procedures for underground coal mines; 2) frequent inspection of each underground mine and investigation of complaints; 3) protection of miners against retaliatory discrimination; and 4) enforcement authority. Additionally, MSHA also reviews mining plans and training programs. It operates an academy to train inspectors, technical support personnel, and mining industry personnel. It approves products for use in underground coal mines to avoid fires and explosions. It provides technical assistance to mine operators. It cooperates with states in the development of mine safety and health programs, makes grants to states in which mining takes place, and oversees rescue and recovery operations.

MSHA maintains a substantial staff of inspectors, specialists and administrative personnel in Utah. Additionally, MSHA's local staff have access to MSHA's national resources, including research and training facilities, technical expertise, and emergency response and management.

IV. UTAH'S POST-MSHA ACTIONS

As the federal government played a larger and larger role in coal mine safety, the Utah Legislature reduced Utah's coal mine safety program.

By the end of 1979, although the statutory basis for Utah's state program remained intact, the state program had only three coal mine inspectors to perform inspections and administer the miner certification program. Even this limited state program depended primarily on federal funding.⁷

In 1987, the Utah Legislature repealed Utah's substantive state rules for coal mine safety and instead required the Industrial Commission to "adopt rules that substantially incorporate the federal safety and health standards relating to coal mining, including those promulgated under the Federal Mine Safety and Health Act of 1977 and its amendments."⁸

In 1988, the Utah Legislature specifically prohibited the Industrial Commission from exercising any authority or perform any mining inspections or enforcement of safety rules "so long as Utah's mining operations are governed by federal regulations." At the same time, the Legislature amended what was then Utah Code Annotated §35-1-19 (now §34A-1-407), which generally gave the Commission authority to investigate complaints of unsafe working conditions in any place of employment. The 1988 amendment limited this general authority by specifying that "For any Utah mine subject to the Federal Mine

Safety and Health Act, the sole duty of the commission shall be to notify the appropriate federal agency of the complaint.”⁹ These restrictions have been carried forward through subsequent statutory amendments and recodifications and are now found in § 34A-1-105(10) and § 34A-1-407(1)(b) of the Utah Labor Commission Act..

In 2001, the Legislature repealed statutory provisions that limited underground coal miners to 8-hour shifts, unless longer shifts were approved in advance by the Commission.¹⁰

In summary, beginning in the late 1970’s, as MSHA began to exercise its authority under federal law to regulate and enforce coal mine safety, the State of Utah has reduced the state’s involvement. This is likely the result of a legislative judgment that, state involvement would be an unnecessary duplication of federal efforts under MSHA.⁷ As a result of this policy decision, Utah’s involvement in underground coal mine safety is limited to two areas: 1) certifying the competence of coal mine personnel working in safety-related occupations, pursuant to Title 40, Chapter 2, Utah Code Annotated; and 2) establishing and enforcing standards for certain auxiliary equipment, such as boilers and elevators, pursuant to Title 34A, Chapter 7, Utah Code Annotated.

VII. OTHER STATES’ PATTERNS

There can be no argument that underground coal mining is a dangerous occupation. As noted by the Committee on Education and Labor of the U.S. House of Representatives in 1977:¹¹

“Mining represents a small segment of the working population, yet the operation is of a nature that is so unique, so complex, and so hazardous as to not fit neatly under the Occupational Safety and Health Act. A miner’s chances of getting killed on the job are eight times as great as those of a laborer in manufacturing. . . . Studies have shown that accelerated

emphasis on production tends to push up both fatality and injury rates among miners.”

The foregoing comments refer to all mining, not just coal mining. The following table quantifies the United States’ historical experience with the dangers of coal mining.

Table Two: Historical data—U.S. fatalities from coal mining accidents. ¹²

Year	Miners	Fatalities	Year	Miners	Fatalities	Year	Miners	Fatalities	Year	Miners	Fatalities
1900	448,581	1,489	1930	644,006	2,063	1960	189,679	325	1990	168,625	66
1901	485,544	1,574	1931	589,705	1,463	1961	167,568	294	1991	158,677	61
1902	518,197	1,724	1932	527,623	1,207	1962	161,286	289	1992	153,128	55
1903	566,260	1,926	1933	523,182	1,064	1963	157,126	284	1993	141,183	47
1904	593,693	1,995	1934	566,426	1,226	1964	150,761	242	1994	143,645	45
1905	626,045	2,232	1935	565,202	1,242	1965	148,734	259	1995	132,111	47
1906	640,780	2,138	1936	584,582	1,342	1966	145,244	233	1996	126,451	39
1907	680,492	3,242	1937	589,856	1,413	1967	139,312	222	1997	126,429	30
1908	690,438	2,445	1938	541,528	1,105	1968	134,467	311	1998	122,083	29
1909	666,552	2,642	1939	539,375	1,078	1969	133,302	203	1999	114,489	35
1910	725,030	2,821	1940	533,267	1,388	1970	144,480	260	2000	108,098	38
1911	728,348	2,656	1941	546,692	1,266	1971	142,108	181	2001	114,458	42
1912	722,662	2,419	1942	530,861	1,471	1972	162,207	156	2002	110,966	27
1913	747,644	2,785	1943	486,516	1,451	1973	151,892	132	2003	104,824	30
1914	763,185	2,454	1944	453,937	1,298	1974	182,274	133	2004	108,734	28
1915	734,008	2,269	1945	437,921	1,068	1975	224,412	155	2005	112,449	22
1916	720,971	2,226	1946	463,079	968	1976	221,255	141	2006	119,248	47
1917	757,317	2,696	1947	490,356	1,158	1977	237,506	139			
1918	762,426	2,580	1948	507,333	999	1978	255,588	106			
1919	776,569	2,323	1949	485,306	585	1979	260,429	144			
1920	784,621	2,272	1950	483,239	643	1980	253,007	133			
1921	823,253	1,995	1951	441,905	785	1981	249,738	153			
1922	844,807	1,984	1952	401,329	548	1982	241,454	122			
1923	862,536	2,462	1953	351,126	461	1983	200,199	70			
1924	779,613	2,402	1954	283,705	396	1984	208,160	125			
1925	748,805	2,518	1955	260,089	420	1985	197,049	68			
1926	759,033	2,234	1956	260,285	448	1986	185,167	89			
1927	759,177	2,231	1957	254,725	478	1987	172,780	63			
1928	682,831	2,176	1958	224,890	358	1988	166,278	53			
1929	654,494	2,187	1959	203,597	293	1989	164,929	68			