COSSIN PETTIEEN
If you watched recent coverage of West Virginia and Mexico’s coal mining accidents, you know under- ground mining – be it coal, iron, diamonds or what have you – is one of the world’s most dangerous professions, even with modern rescue systems.

Mining fatalities fascinate people, especially the media. People wonder what makes a miner tough, how they hold together? Why do they die? Why do they hold to the northwestern Minnesota mining community, tick. How does mining operate under adverse conditions?

One answer is that, for generations, mining has offered job security, often through tough economic times. Companies often paid miners more than farmers or other tradesmen, especially the media. How much were miners paid? What does mining mean?

Minnesota Mining & Manufacturing Company, also known as 3M, has been a key player in the mining industry. 3M is headquartered in St. Paul, Minnesota, and has operations around the world. The company was founded in 1902 by Charles Hansen, who began making and selling adhesive tape.

The company’s first major product was “rubber-tipped” adhesive tape, which was used to hold parts together during the manufacturing process. The company soon expanded its product line to include everything from automotive products to industrial adhesives.

Today, 3M is a global technology company with operations in more than 200 countries. The company employs more than 80,000 people worldwide and has more than 50,000 patents in its name.

The company’s products include everything from electronic materials to health care products. The company is known for its innovative products and has won numerous awards for its research and development efforts.

3M has a long history of innovation and has been a leader in the development of new materials and technologies. The company has been recognized for its contributions to science and technology, and its products have been used in a wide range of industries.

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In the late 19th century, Cyrl Adams discovered iron near Deerwood. By 1906, ore was stockpiled above ground. Building access roads and railroads took longer. The first shipment from Cuyuna Range reached Duluth in 1911, and the new range quickly became a valuable asset to America.

Nine million tons of iron ore came from the Cuyuna Range during its operating years. Yet there was great personal sacrifice to get that ore. Over 200 men died in mine-related accidents and others were maimed or crippled.

Cuyuna’s worst heartbreaking catastrophe is still considered the greatest iron mining accident in America. It occurred in February 1924 when 41 miners drowned in the Milford Mine.

Groundwater was a major problem at Cuyuna Range. A tremendous amount seeped into the mines and had to be continually pumped to prevent flooding. Underground mines were cold and damp, although warmer in winter than working outside.

“It was a bad dream, but it did happen.”

On the afternoon of February 5, 1924, alarm whistles screamed on the Cuyuna Range. The Milford Mine, seven miles north of Crosby, suddenly flooded with water and mud from Foley Lake. Most of the day shift, 41 of 48 men, drowned.

The 200-foot Milford Mine had multiple levels and one shaft to the surface. Pumps extracted 500 gallons of water per minute, most from the lower level. According to Cuyuna Country, A People’s History “The Milford was between two lakes, Wolford to the northeast, and Foley to the northeast, although the shaft was deeper in the first, the bottom level extended under a bog bay near Foley Lake.”

The Milford’s ore held quality manganese, a metallic element used to enhance wear and strength of steel and was in great demand by steel mills. The manganiferous ore kept getting richer as the miners approached Foley Lake. But the closer they got to the lake and adjacent bog, the more nervous some

Some of the Milford Mine crew died: Superintendent Harry Middlebrook, Steve “Bubash” Perpich, Martin Valencich, Frank Hrvatin Jr., Gust Snyder (with the mal, let on his shoulder), Jacob Ravnik and Clyde Revord. Valencich and Revord died in the Milford accident. Nearly 15-year-old Frank Hrvatin Jr., escaped, but his father did not. Jacob Ravnik also climbed the ladder to safety. Photo courtesy Cuyuna Country Heritage Preservation Society.

“If I knew if we lost a minute, it was too late.”

Veteran miner, Matt Kanis, later interviewed by The Duluth News Tribune said, “I was working not near anybody. Then the wind hit me. I fell down and my lamp went out. I lit it, went out again. It was dark and cold. The wind hit me again. I knew what it was. I was in a time like that once in Michigan. I knew if I lost a minute, it was too late. I yelled. Then I ran like hell. We can’t save our life more if we don’t run. I know.”
Failure to learn? Destined to repeat ...

so I run. No time for the gate, no time for the cage. No time for anything. I just run and fall down, and run some more. I get to it, I reach it, I miss it. I grab it and start up. I am all in. But I’m dammed if I stop!

Nearly 15-year-old Frank Hrvatin, Jr., worked with his partner, Harry Hosford. Workers under 18 weren’t allowed underground, but Frank Jr., tall and husky, looked older. His father, Frank Sr., was an expert blaster earning $6 a day. Young Hrvatin earned $3.80 daily as a dirt tammer, but Frank Sr. was trapped with the others. People standing near Foley Lake could see the thick ice crack and the water level drop.

Over 50 years later, when interviewed about the Milford disaster, a former Milford mine inspector doubted any bodies would be recovered. Some wanted the mine closed as a shrine. But the families requested their loved-ones be returned. Milford owners agreed, knowing if the mine reopened, valuable manganese was yet uncurtained. George H. Crosby of the Whitmarsh Mining Company who owned the Milford, said they would spare no expense and do ‘everything possible to recover the bodies at the earliest possible time. Pumps will operate day and night.’

Uniting in a brotherhood, men and equipment arrived from competing Cuyuna mines and Mesabi and Vermillion ranges. By midnight, in subzero temperatures, pumps were sucking out thousands of gallons of mucky water. But more continued emptying into the mine.

“Pumping the shaft was pointless. First the lake would have to be drained."

Less than fifteen minutes
I knew I’d never see my dad no more. They were all dead.

Frank Hrvatin, Jr.—
15-year-old milford miner

When Matt Kangas reached the ladder, he had little strength for the 175-foot climb to the surface. Hrvatin Jr. and Hosford were behind Kangas on the ladder. With water already rising up the shaft, Hrvatin jumped into the older miner’s legs and boosted Kangas up could disconnect it. Other villages, mines and locomotives shivered their alarms. As Berger Aulie said in The Milford Mine Disaster: A Cuyuna Range Tragedy: ‘Whistles, alarms and bells sounded like a pack of coyotes or wailing banshees ... almost as if they thought hanging on

The whistles would stop the disaster from happening.”

Frank Hrvatin, Jr. remained by the shaft, standing down at musky, bubbling water. His father, Frank Sr. was trapped with the others. People standing near Foley Lake could see the thick ice crack and the water level drop.

Over 50 years later, when interviewed about the Milford disaster by Berger Aulie, said, “I took my partner out of the mud. Hrvatin said, choking up and sounding frantic. He was in mud up to his hips. That’s how fast the water came in – but we made it. Less than 15 minutes. I knew I’d never see my dad no more. They were all dead.”

Hrvatin remembered "super human strength" on his climb to the surface.

Thirty-eight of the 41 miners drowned were married, 8 children fatherless. New widows, shocked and grieved, joined arms and walked the streets waiting for news. A Crow Wing County mine inspector doubted any bodies would be recovered. Some wanted the mine closed as a shrine. But the families requested their loved-ones be returned. Milford owners agreed, knowing if the mine reopened, valuable manganese was yet uncurtained. George H. Crosby of the Whitmarsh Mining Company who owned the Milford, said they would spare no expense and do ‘everything possible to recover the bodies at the earliest possible time. Pumps will operate day and night.’