The worst industrial disaster in the USA

Hawk’s Nest Incident (The Tunnel of Death)

More than 5000 men, desperate for jobs during the Great Depression, in 1930–31 bored through Gauley Mountain in Fayette County, West Virginia, to create the Hawk’s Nest Tunnel. The tunnel was drilled for an approximate distance of 3.75 miles to divert water from New River to a hydro-electric plant at Gauley Junction. Some 2500 worked inside the tunnel and conducted dry drilling and blasting through sandstone. In most of the tunnel the rock which was drilled contained more than 90 percent silica. That in some of the headings it ran as high as 99 percent pure silica. Totally inadequate precautions were taken to prevent respirable silica exposure. Tunnel workers were often hustled back in immediately after blasting. A large number of the workers, many of whom were migrant African Americans from the South, died of acute silicosis. Some would also have died of blasting fumes, carbon monoxide poisoning, falls and cave-ins. Studies suggest the death toll from exposure to silica dust was at least 764, some have stated over 1000.

Many workers died on the job and bodies were dumped in the riverbed and covered with tunnel debris. As the death rate accelerated, a local undertaker was hired to dispose of bodies on a farm in Nicholas County. From its inception in 1924, Hawk’s Nest Tunnel had been intended not as a public utility, but as a power source for a new electrometallurgical complex. With metallurgical processing in mind, engineers and geologists had plotted the tunnel to run through veins of 97 to 99 percent pure silica. During construction, these highly refined mineral concentrations were extracted and sold to the Electro-Metallurgical Company for use in processing steel. Large sections of the tunnel, those that contained the richest deposits, had been widened to maximize profits from in-house transactions. Licensed as a public utility, Hawk’s Nest Tunnel had been drilled as a silica mine.

Inspectors from the West Virginia Department of Mines repeatedly tried to visit the site, but the company originally kept them out saying it was a construction site not a mine. A company doctor had routinely assured ailing workers that their symptomatic coughs and pneumonia were a transient condition, ‘tunnelitis’, caused by harmless rock dust. No airborne dust measurements were taken. On May 20, 1931, the Fayette Tribune published the first reports of unsafe working conditions in the tunnel, but confirmation was impossible due to a ‘gag rule’. In 1932 several lawsuits began to be filed on behalf of some of the afflicted workers. In court the company denied that there was a dust problem or that they knew that silica was dangerous.

In 1935 the West Virginia House of Delegates passed a new state worker’s compensation law which would compensate workers who had developed silicosis, the first in the USA.

How the blues shaped silicosis prevention in the USA

In addition to the national exposure the Hawk’s Nest Disaster received, the famed blues musician, Pinewood...
"From its inception in 1924, Hawk’s Nest Tunnel had been intended not as a public utility, but as a power source for a new electrometallurgical complex."

Tom, wrote and recorded a song appropriately titled: ‘Silicosis is Killin’ Me’.

Pinewood Tom’s (a nom-de-blues of Josh White) lyrics include:

I said, Silicosis you made a mighty bad break of me
Now, Silicosis made a mighty bad break of me
You robbed me of my youth and health and all you brought for me was grief
Now, Silicosis, you are a dirty robber and a thief
Now, Silicosis, dirty robber and a thief
Robbed me of my right to live, and all you brought poorest me was grief
I was there diggin’ that tunnel for six bits a day
I was there diggin’ that tunnel for six bits a day
Didn’t know I was diggin’ my own grave, silicosis eat my lungs away

I says “Mama, Mama, Mama, cool my fevered head.”
I says “Mama, Mama, come and cool my fevered head.”

Markiewicz reported that the American President, Franklin D. Roosevelt was intrigued by Josh White’s blues music. Roosevelt met with Josh and they became good friends. Josh performed at Roosevelt’s inauguration, and he was the first African-American to perform at the White House. Eleanor Roosevelt especially liked Josh and she became the godmother to Josh Jr.

Josef’s description of the hard life suffered by African-Americans had a strong influence on Roosevelt. Josh’s silicosis blues heightened Roosevelt’s concern about Hawk’s Nest, and at Roosevelt’s urging a congressional hearing convened on the incident.

One week following the congressional hearing, a
group of industrialists met to establish a response to the problem of ‘dusty trades’. The meeting led to the formation of the Air Hygiene Foundation in 1936. A goal of the foundation was to set up “authoritative and approved standards for the control of industrial dusts which, if complied with by industries or, by industrial companies, will act as a defense against personal injury suits.” Markiewicz considers that the formation of the Air Hygiene Foundation (name changed to Industrial Hygiene Foundation in 1941 and later to Industrial Health Foundation) influenced the establishment of the American Conference of Governmental Industrial Hygienists (1938), American Industrial Hygiene Association (1939) and a forerunner to modern-day Threshold Limit Values.

**HOUSE OF REPRESENTATIVES SUBCOMMITTEE REPORT**

Following Congressional hearings a House of Representatives Subcommittee Report in 1936 stated:

“That the effect of breathing silica dust is well known to the medical profession and to all properly qualified mining engineers. The disease is incurable. It always results in physical incapacity and in a majority of cases is fatal. That for more than 20 years the United States Bureau of Mines has been issuing warnings and information while conducting the educational campaign on the dangers of silicosis and means of prevention. That the principal means of prevention are wet drilling, adequate and proper ventilation, and circulation of air, the use of respirators by the workmen, and drills equipped with a suction or vacuum-cup appliance.

“The subcommittee finds that there was an utter disregard for all and any of these approved methods of prevention in the construction of this tunnel. It is ...the story of men in the darkest days of the depression, with work hard to secure, driven by despair and the stark fear of hunger to work for a mere existence wage under almost intolerable conditions.”

By the end of 1937, a total of 46 states in the USA had passed laws relevant to workers with silicosis.

**Note**

The worst industrial disaster in the US, the blues, an American President, a congressional hearing, a foundation created by industrialists to allay public concern and avoid litigation, the ACGIH and AIHA formation – this story begs further work. Interestingly, the first ILO International Conference on Silicosis took place in the same year as the construction of the Hawk’s Nest Tunel started and the Global Programme has the elimination of silicosis as an occupational disease by 2030, a century after the major disaster and landmark conference.

**REFERENCES**


**Books available**

   Due to company protests it was immediately withdrawn from the market by the publisher and the original production run was destroyed. Republished in 2004 by University of Tennessee Press, USA.
   Formerly a physician and researcher at NIOSH, Dr. Cherniack undertook this study to learn what really happened at the town of Gauley Bridge, West Virginia.
   During the Depression, silicosis emerged as a national social crisis in the US. By the 1950s, however, silicosis was nearly forgotten by the media and health professionals. Asking what makes a health threat a public issue, the authors examine how a culture defines disease and how disease itself is understood at different moments in history. Available at Google Books: http://books.google.com

**Silicosis Blues**

Silicosis Blues is available on a number of CDs including: Freedom: At the Library of Congress (1940); Josh White Vol. 3 (1935-40); Josh White the Essential and Josh White Blues Singer 1932-1936.

Sound Samples of Silicosis Blues are available at online stores including: CD Universe and the iTunes Music Store.