This Date in Safety History: April 26, 1986 — The Chernobyl Disaster



Thirty-nine years ago today, at 1:21 A.M. local time, an explosion occurred at the No. 4 reactor at the V.I. Lenin Nuclear Power Plant in a Ukrainian city on the Pripiat River called Chernobyl. The blast released 30 to 40 times the amount of radioactivity as the bombs dropped on Hiroshima and Nagasaki combined. The subsequent evacuation of cities and villages within a 30-mile radius forced hundreds of thousands of Ukrainians, Russians, and Belarusians from their homes. The plume of radioactive fallout drifted westward reaching as far as the eastern United States.

The Costs of Chernobyl

The Soviet government's cover up has made it hard to calculate the toll of the disaster. The number of deaths and injuries are still the subject of fierce debate. Estimates vary widely. Greenpeace has claimed that at least 93,000 and as many as 200,000 died as a result of the accident. According to a 2005 World Health Organization report:

- 56 people died as a direct effect of the accident, including 35 operators, workers, and fire responders.
- 47 accident workers and 9 children developed thyroid cancer as a result of exposure to radioactivity.
- At least 9,000 more people were expected to die later

from some form of cancer.

Acute radiation syndrome (ARS) was originally diagnosed in 237 people onsite and involved with the clean-up and it was later confirmed in 134 cases, according to the World Nuclear Association. Of these, 28 people died as a result of ARS within a few weeks of the accident. Estimated financial costs: More than \$700 billion over 30 years.

The Legacy of Chernobyl

The legacy of Chernobyl is also still debated. Environmental groups point to the accident as proof that nuclear power is too dangerous to be controlled and should be abandoned. Defenders of nuclear power point to the egregious lack of safety controls at Soviet nuclear power plants. The Chernobyl disaster did significantly curb the development of Soviet nuclear power and exposed the cruel indifference of the regime to human safety and suffering. It also helped to fuel separatist movements that led to the 1991 fall of the Soviet system and establishment of independent Ukrainian and Belorussian states.

Unlike in the old Soviet Union, Canada strictly enforces OHS laws governing workplace exposure to radiation in not just nuclear power plants but all industrial sites where <u>ionizing</u> radiation is present, including <u>special protections for pregnant workers</u>.