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The Storm Decline Accident : An Investigation of The Use and Performance of Self-Contained Breathing Apparatus

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ABSTRACT

In October 2002, a tragic accident occurred at the Storm Exploration Decline, Barrick Goldstrike Mine Inc., Elko, Nevada. One miner was fatally injured and another was critically injured when they collapsed while evaluating conditions in an inactive underground gold mine. The second miner subsequently died in the hospital. The victims were part of a mine rescue team that had been directed to explore a gold mine using SCBAs. The mine had been inactive for more than two years. Mine management was aware that the mine had not been ventilated since April 2000 and expected the temperature in the mine to be near 100 degrees Fahrenheit with very high humidity.

The slope of this decline was reported to be average 15 percent to the surface. On the day of the accident, a three-man team entered the mine using SCBA apparatus. They advanced 800 feet before the effects of high heat, high humidity, and foggy conditions forced their return to the surface. Underestimating the hazards presented by this environment, the second team entered the mine and advanced about 2,000 feet before deciding to return to the surface. The two victims were part of this second team.

The accident resulted from a failure to accurately assess the risks from environmental exposure to excessive heat and humidity. Contributing to the severity of the accident was the failure of the miners to maintain and use their SCBA breathing apparatus properly.
This paper reports on the results of the MSHA investigation, including the joint NIOSH/MSHA investigation regarding the use and performance of the SCBAs used by the miners.