Leaky Methane Seal and Torch Didn’t Mix

A leaking methane seal and an open flame were key factors in a Kentucky mine explosion that claimed five lives in May 2006.

A report released by the Kentucky Office of Mine Safety and Licensing found that the protective seal had not been constructed properly and did not meet federal guidelines. Mine foreman Amon Brock, 51, and maintenance worker Jimmy Lee, 33, had been using an acetylene and oxygen torch to cut a metal rod strap that intersected a return seal.

Both were killed from multiple blunt force trauma and heat injuries when the torch ignited methane gas. The report stated that the construction of the seal was contrary to the ventilation plan and apparently allowed the seal to leak methane gas.

Three other miners at the Kentucky Darby No. 1 Mine – Roy Middeton, 35, George William Petra, 49, and Paris Thomas Jr., 53, died from carbon monoxide poisoning. A fourth worker, Paul Ledford, survived after crawling into a main intake air course.

All four had been using self contained, self-rescuers, which Ledford said worked initially. Ledford said he passed out at one point, but awakened and was able to crawl to fresh air. The other three never made it.

Mary Middleton and Tilda Thomas, widows of two of the victims, say the self-rescue devices need to carry more oxygen to give miners more survival time.