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## **Methane Threat Explosion In Wieliczka Salt Mine**

### Abstract

Methane threat has accompanied miners in the Wieliczka salt mine since the very beginning of salt extraction. Methane leaks caused serious impediments in safe conduct of underground work, whereas methane ignition and explosions resulted in burns and fatalities among the mining personnel.

Increased probability of occurrence of this dangerous gas existed with respect to work in the “spiz” salt deposits and in the vicinity of southern and northern border of the bed. It also accumulated in significant amounts in the Crystal Grottoes and in their direct vicinity.

Manners of eliminating methane threat changed throughout history: from preventive methane burning, improvement of ventilation and modern techniques of methane detection. Mining regulations were also used to ensure safety.