

PUBS. REFERENCE

State of Alaska
Department of Natural Resources
DIVISION OF GEOLOGICAL SURVEY
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DANGERS IN OLD MINE OPENINGS

The emphasis of the need for fallout shelters has led many communities and individuals to plan on using idle or abandoned mine tunnels, drifts, and/or shafts for shelters when an emergency arises. In many cases, these underground openings may actually provide adequate protection as planned or hoped, but a warning must be sounded as to the dangers of going into such openings without first taking careful precautions. No one should enter, much less plan to remain in, an old mine opening that has not been thoroughly inspected, repaired if necessary, and declared safe by a qualified person. Otherwise, severe injury and even death may result. Where openings are planned for shelters, they should be thoroughly examined and made as safe as possible by, or under the direction of, a competent miner or mining engineer.

Precautions that must be taken include, but are not limited to, the following: (1) the back and ribs (ceiling and walls) must be examined and barred down or timbered to reduce the danger of falling rock, (2) overhead chutes must be blocked by timber to prevent rock from the overhead stopes or rooms from falling into the tunnel, (3) downward chutes and other openings must be likewise blocked to prevent persons from falling into them, (4) old timber must be examined and replaced where needed, (5) the presence of harmful or deadly gases must be suspected and properly checked for, (6) sufficient ventilation must be provided, depending on the gassy nature of the opening and the number of people to be accommodated, and (7) the portion of the tunnel or opening used as a shelter, and the escapeway, should be in solid rock, if possible, to help prevent collapse or cave-in by blast concussion.

Gases are particularly likely to be encountered in coal mines and old mine openings which were heavily timbered. The presence of gas can be safely detected only by the use of a safety lamp in the hands of a qualified individual. In coal mining, personnel who use safety lamps for inspection of working places for the safety of the miners must first be certified by an official examining board as to their competency and experience. There are a few of these qualified individuals in Alaska at the various coal mines in addition to the State Coal Mine Inspector of the Division of Geological Survey and the Federal Coal Mine Inspector of the U. S. Bureau of Mines.

The State Coal Mine Inspector and the State Mining Engineers are available for examination and/or recommendations on old mine workings under certain conditions, and as travel funds permit. Where the planned use of an old mine opening is part of a community's Civil Defense plan approved by the CD authorities, and a request for an examination of the opening has been cleared through Civil Defense, Division of Geological Survey personnel will, if travel funds permit and if accompanied by a representative of the community, make such examination and recommendations as are advisable.

One other caution regarding old mine openings in Alaska should be noted here. They are cold and wet. Few people realize this until they have spent some time underground. Sitting still, one becomes uncomfortable in a very short time. There is little room for exercise, and heating devices consume oxygen, create gases or smoke, and increase the ventilation problem. Cases of pneumonia among those with colds or low resistance would probably start showing up after a few days unless some means of keeping people warm and dry were devised.