

FREEZE THAW CYCLES



ALWAYS EXAMINE AND CORRECT UNSTABLE HIGHWALL CONDITIONS

Spring generally result in an increase of activity at surface coal mines, preparation plants, and at the surface areas of underground coal mines. Seasonal changes impact upon many aspects of mining activity and often results in an increase in haulage, machinery, maintenance, and other surface mining related accidents.

- Frequent freeze / thaw conditions loosen once solid rock on highwalls, road cuts and portal face ups. Structural fills of coal mine refuse, materials for constructing impoundments, and filled areas for building facilities, roads or stockpiles cannot be properly constructed of wet / frozen materials.
- Sudden and excessive precipitation can overcome drainage systems, damage road surfaces, plug culverts and decants, fill settling ponds and overpower designed capacities and spillways at impoundments.
- Wet and muddy roads, deferred berm and road repairs, damaged dump points, or compromised fill areas can pose serious operating hazards for surface haulage equipment operators and also increase maintenance demands.
- Muddy and adverse ground conditions accelerate wear on equipment braking systems.
- Haul trucks and other mobile equipment require more frequent maintenance and cleaning to maintain operator visibility. Effective equipment lighting is also problematic under wet and muddy conditions.

