

MSHA's Accident Prevention Program Safety Idea



Working Near the Edge Beware of Soft Areas; Stay Perpendicular

Category: Drilling
Mine Type: All Surface

Recent accidents show the need for extra care when working near the edge of a highwall or slope.



Accident No. 1: A drill toppled over a highwall, crushing the driller, when the support jack near the edge of the highwall sank into soft, unconsolidated material as the tower was being raised.



Accident No. 2: A dragline toppled into the pit when the soft soil it was sitting on gave way as the operator swung a load of material.

When operating equipment near the edge of a slope, keep the following points in mind:

• Before setting up, check the top and face of the slope for indications - such as rutting, cracking, sliding, or slumping - that the material near the edge may be too weak to support the equipment.

- Be especially alert when ground conditions change to a softer or weaker material. Uncompacted or cast spoil, for example, may be loose and contain voids.
- Position equipment perpendicular to the edge of the slope to provide better stability should a portion of the edge give way.
- Be alert for signs of movement or inadequate bearing as the equipment is being positioned and during operation. Check level sensors frequently.
- Use bearing pads or blocking to provide adequate bearing-area when the ground is soft. Make sure blocking is readily available wherever soft conditions may be encountered.

When using leveling jacks, be sure to:

- Check the pads for excessive penetration into the ground as the load is applied;
- Extend the jacks just enough to level the equipment, keeping the equipment as low to the ground as possible; and
- Avoid using the jacks in their fully-extended position.

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Remember - Safety is a Value that you can LIVE with!