

MSHA Job Safety Tips

Haulage Roads

Haulage road conditions can play a big part in the safety of a mining operation. Poor road conditions can make it much more difficult to operate equipment safely.

Hazardous conditions include: grades that are **too steep**; roadways that are **too narrow**; inadequate traffic control signs; unstable slopes; **poor drainage**; problems due to weather conditions; **inadequate sight distance** at the crest of hills and around curves; and **lack of adequate berms** or guardrails.

These conditions can lead to loss of control of the truck, collisions with other vehicles, runaway trucks, and trucks going off the roadway and overturning.

Important considerations for keeping haul roads safe include:

- Roadways wide enough to allow the safe passage of the largest equipment that uses the haul road.
- **Adequate berms or guardrails** on elevated roadways where there is a danger of a vehicle running off the road. **Berms higher than axleheight should be used in more critical areas such as at steep grades and sharp curves.**
- Haul road **grades** compatible with the capabilities of the equipment using them. Steep grades have been a factor in haulage accidents.
- Traffic signs to control traffic flow and to provide vehicle operators with information (such as **speed limits, grades, and traffic patterns**) to help ensure safe operation.
- Roadways that are **inspected, maintained, and repaired regularly**. Special checks should be made after changes in weather conditions.
- Drivers trained on any change in traffic patterns.
- It is especially important that **new operators** be instructed on the capabilities of the equipment they are operating, and any special driving precautions that should be taken on the mine's haul roads.
- Vehicle operators should be alert to, and **anticipate, changes in road conditions**, especially with changes in the weather.

- Operators should **promptly inform** company officials of any unusual or **potentially dangerous road conditions**. Examples would be:
 - » Poorly drained areas;
 - » Soft shoulders;
 - » Washed out areas, ruts and gullies;
 - » Boulders or debris on the roadway;
 - » Ice and snow drifts;
 - » Cracks or unstable slopes above or below the roadway; or
 - » Excessive dust.

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