Powered Truck Haulage Dumping Procedures - Surface Mines

MSHA 1011 (BP-11)

Best practices provide you, the truck driver, with useful information on how to safely operate the truck and make you an active member of the mine safety team. The following best practices give you a starting kit of the best tools some of the safest mining companies can think of to help keep you safe. Be aware, however, that there are differences at your specific mine that can prevent using some of the best practices listed here.

You are the most valuable part of the truck. Operate defensively and be alert.

Your truck has a tremendous amount of power. Respect that power when operating it.

Learn the audible and visual signals to be used at your mine. Know who has the responsibility to give them.

Learn the operating specifications of the truck; they are found in the manufacturer's manual. If the truck does not have a manual, get one from your supervisor. Your life could depend on it.

Know the

- Stopping distance for your truck
- Maximum grade and speed
- Gear/speed/grade information
- Secondary (emergency) brakes and secondary (emergency) steering operation
- Appropriate use of retarder
- Fire suppression and other emergency equipment and procedures
- Operating procedures under varying weather and road conditions
- Gauge readings indicating vehicle systems within specified ranges
- Operating procedures of the truck's Dump Override System (DOS), if equipped

Before operating the truck

- As a responsible driver, you do not have to operate unsafe equipment or drive in unsafe conditions.
- Do a complete walk-around inspection of the truck before boarding.
- Conduct a safety check of the truck and test systems before driving. Use a buddy system to test lights, certain types of brakes, and steering joints.
- Buckle up and stay buckled.
- Put your mind in gear before moving, or putting the truck in gear. Sound audible warning device to warn people around the truck that you are preparing to move it. This is especially true if the truck has been in idle.
- Pay attention to your machine and your surroundings. Watch out for animals, people, other vehicles, changing road surfaces, odd sounds, slumping or sloughing slopes, highwall and haul road conditions, downed or low wires, lighting or visibility problems, and unusual response of vehicle controls. Tell your supervisor so the problem can be fixed.
- Avoid miscommunications and unexpected movements by talking with your coworkers before, during, and after field repairs or maintenance.
- Be aware of changes in conditions - weather, traffic, visibility, haul route, or other work in progress.
- Watch your speed at all times. Set the parking brakes, place all controls in "off" or "shutdown," and turn the wheels into the hill or use chocks when leaving the truck cab for any reason. When using wheel chocks always place them on the driver's entry side. This will remind you to pick up the chocks before returning to the cab.

DUMPING PROCEDURES

- Follow the dumping procedures used at your mine.
- Check the dump area: cracks along its top edge, overly steep slopes, sunken areas, and soft areas. The weight of your truck near an unstable edge can be enough to break it loose and take you with it.
- Watch the weather. Rain, melting snow, and freezing and thawing can weaken the dump area and lead to unstable slopes.
- Make sure the dumping area is level or slopes slightly upward toward the edge. This will help you to more easily control the truck when backing up and will permit

water to drain away from the dump.

- Be sure the dump area is adequately lighted.
- Cross windrows at an angle, one wheel first to prevent jarring the load, the truck, and yourself.
- Approach the dump site from left to right (when possible).
- Keep at least one truck width away from the berm.
- Make sure the dumping berm is in place. Contact the appropriate supervisor if it is not.
- Make your turn to back up at least one truck width away from the dumping berm to avoid overloading the dump edge.
- Keep at least two truck widths apart if more than one truck is dumping at a time to help prevent collisions or weakening the dump area.
- Back up perpendicular or at a slight angle to the dumping berm so the truck's left rear tire approaches the berm first. This can help you keep the truck from penetrating or going through the berm.
- Do not expect the berms or bumper blocks to stop the truck.
- Back up slowly and come to a gradual stop at the dump point. This prevents overloading the truck's rear axle or causing the edge of the dump area to break away.
- Stop just before the truck reaches the berm or bumper blocks.
- Shift the truck into "neutral" when dumping.
- Set appropriate brakes when dumping.
- Do not use the retarder brake when dumping.
- Contact kills! Make sure your truck is clear of overhead power lines, people, and other equipment before raising the truck bed and dumping the load.
- Watch for material stuck in the truck bed - it can make the machine unstable.
- Be sure your truck is clear of overhead power lines, people, and other equipment before lowering the truck bed.
- Completely lower the truck bed before leaving the dump area. For better vision turn left (whenever possible) when leaving the dump area.

STOCKPILES

Stockpiles are especially hazardous when there are activities at the top edge and the toe. Loading out material at the toe causes sloughing which can cover the loader. It can also make the slope too steep, making the top edge of the pile unstable for trucks which may be dumping at the top.

- Pay attention to the stockpile and its surroundings.
- Always dump where there are no activities in the immediate area or below.
- Never dump over a slope that is too steep.
- Dump at least one truck length away from the edge.

SPOIL PILES

Spoil piles can be soft, weak, loose, and have steep slopes which may cause instability. Of special concern are dumps that are constructed by trucks end-dumping over the dump edge to form angle-of-repose slopes.

- Check the dump edge for sloughs and cracks along the edge before approaching the dump.
- Look for bumper blocks, safety hooks, or similar impeding devices at dumping locations to prevent overtravel.
- Too much moisture can weaken the pile – **be careful**!

BINS AND HOPPERS

Watch for overhead obstructions, chutes, gratings, stopping blocks, and guide rails. Before pulling in to dump, look over the area to check for damage to any of these features. Dumping at these areas is very repetitive and special efforts are needed to maintain driver awareness – **stay alert**.

Arrive Home Alive

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