

SAFE DRIVING TECHNIQUES AROUND STOCKPILES

Dump trucks sometimes unload materials near the edge of stockpiles. In 2015, a dump truck operator was killed when his truck went over the edge at a dumping point. WorkSafeNB reminds dump truck operators, equipment operators, contractors and employers of the hazards associated with this task.

Some employers/operators prohibit the practice of backing up to the edge of a stockpile. Where this activity is not prohibited, following proper backing procedures is critical.

Points to consider:

- Most of a dump truck’s weight is on the rear axle, creating even more stress on the edge of the stockpile.
- Even at its angle of repose, a stockpile, because its material is loosely placed and in thick layers, is not very stable and can easily collapse.

Employers should:

- Maintain adequate berms to provide a visual reference point of the edge for the operator.
- Ensure the dump area is slightly graded toward the edge of the stockpile. This gives the operator better control, provides better drainage and makes it easier for the operator to pull forward in the event of a problem (crest failure).
- Ensure the dump area is completely level from side to side, so that the weight is even when dumping the load.
- Check for cracks or any other indication of soil failure before dumping a load. If these are observed:
 - Use a bulldozer or loader to push the material over the edge and make a new dumping area, or
 - Unload the material short of the intended dump area (short dumping) and use a bulldozer or a loader to push it over the edge.
- Train all operators on safe stockpiling techniques and the dangers of dumping near stockpiles.
- Ensure material is not dumped near the edge of the stockpile if materials are being removed from the bottom; this can change the angle of repose and create a greater risk of collapse. Use the short dump method in this case.
- Maintain a minimum distance of five metres when short dumping materials for stockpiles. WorkSafeNB recommends this distance based on an engineering firm’s analysis and advice.



Operators must:

- Ensure equipment is in good working order and wear the seatbelt.

Operators should also:

- Only use the berm as a visual indicator and not to stop the equipment.
- Check for cracks or other indications of soil failure before backing up to a dump point.
- When backing up toward the dump point, travel in a straight line directly toward the edge (perpendicular to the edge), and not on an angle.
- Drive slowly and come to a gradual stop when backing up near the edge of a stockpile.
- Perform short dumps if there are concerns about the dumping area’s stability or if materials are being removed from the bottom of the stockpile.