

SAFETY TALK

[trenching – inspection]

Inspecting protective systems in trenches is everyone's responsibility. Sloping, shoring, and trench boxes should be checked regularly.

With hydraulic shoring, look for:

- Leaks in hoses and cylinders
- Bent bases
- Broken or cracked nipples
- Cracked, split, or broken sheathing

Report any of these conditions to your supervisor.

Check timber shoring before it's installed. Discard any damaged or defective lumber.

All shoring and bracing must be certified by an engineer as adequate.

After installation, inspect wales for signs of crushing. Crushing indicates structural problems and the need for more struts.

Always check areas near shoring where water may have seeped in. The combination of water and granular soil can lead to washout. This undermines the trench wall and has killed and injured workers on several occasions.

Inspect trench boxes for damage, cracks in welds, and other defects.

During use, check the box regularly and often to make sure that it is not shifting or settling more on one side than the other. This can indicate the movement of soil or water underneath.

If the box is shifting or settling, get out and tell your supervisor about it.

The ground around trenches should be inspected for tension cracks. These may develop parallel to the trench at a distance of about one-half to three-quarters of the trench depth.

If you find cracks in the ground, alert the crew and double-check your shoring or trench box.

It's dangerous to overlook damage or defects in protective systems.

Even though the job is short-term or almost finished, trenches can still cave in.

Let's go through some inspection procedures.

With hydraulic shoring, check the system for leaks in hoses and cylinders.

With timber shoring, check for:

- Cracked or bowed sheathing
- Wales crushed where they join struts
- Loose or missing cleats
- Split or bowed wales
- Struts off-level

In trench boxes, look for:

- Deformed plates
- Bent or distorted welds in sleeves and struts
- Missing struts
- Bent struts
- Holes, bends, or other damage to plates

[Inspect sloping, shoring, and trench boxes on site. Check ground conditions nearby. Refer to appropriate regulations and codes.]

In New Brunswick, the law regarding trenches can be found in *General Regulation 91-191* under the *Occupational Health and Safety Act*, sections 180-188.