

LFI: **LTI** at Drain Sewer Unblocking

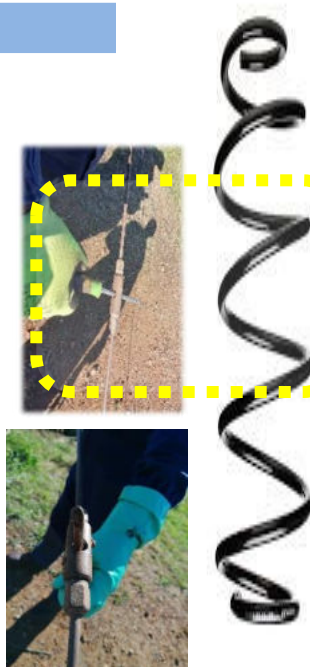
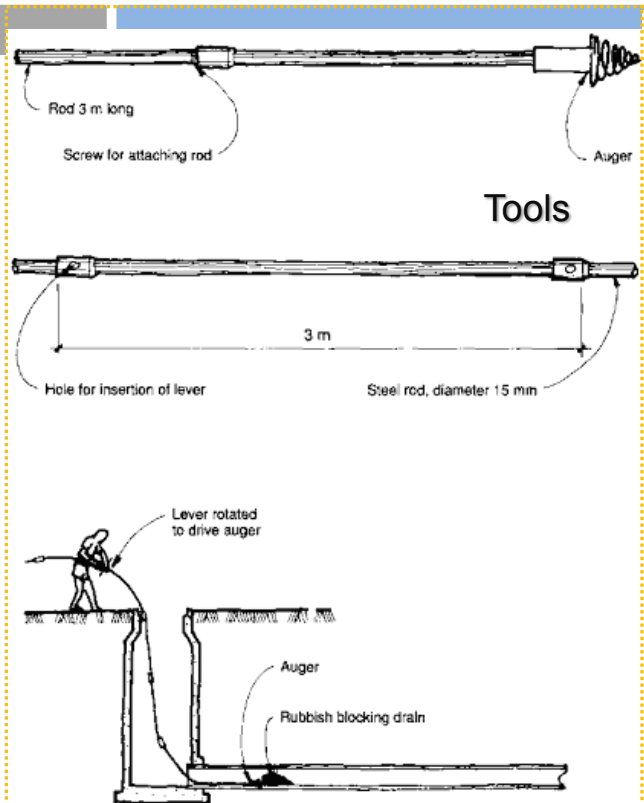


What went Wrong?

- 3 employees were busy using drain rods to unblock the sewerage drain line from Tuckshop to sewerage treatment plant.
- One person was standing at the back turning the lever to allow the turning action;
- The other person was standing in front pushing the rod into the drain manhole.
- The injured was standing in the middle of the drain rods, with the **screwdriver** positioned in the rod connection, assisting with the turning and pushing action of the rod into the drain manhole.
- The rod got stuck, **tension buildup, loss of grip** occurred and the screwdriver / rod hit the employee on the outer side of the **Left eye corner**, resulting in a **deep laceration**.



Why? Hazards not Recognised



Rod length outside manhole:

Length too long outside manhole.

Using the Correct Tools for the Job:

- Drain unblocking is a complex activity require different tools for specific applications.
- Method and practice training is critical given the hazards – thus TRAs and Toolbox are required.
- 5 people died when unblocking a sewerage pump station pipe in Homevale, Kimberley in 2012.



- 3 employees: length too long – twist action must happen inside pipe in manhole, not outside.
- Twist of screw driver – winding up twisting force in steel rod to act against the screwdriver – accident waiting to happen.

Lessons Learned: Use the Correct Equipment for the Job



Unblocking



Using the Correct Tools for the Job:

- Drain unblocking is a complex activity require different tools for specific applications.
- Method and practice training is critical given the hazards – thus TRAs and Toolbox are required.
- 5 people died when unblocking a sewerage pump station pipe in Homevale, Kimberley in 2012.



Slippery PVC Gloves for Twisting and Turning

USE THE
RIGHT TOOL,
FOR THE
RIGHT JOB,
IN THE
RIGHT WAY.

DRAIN CLEANER MACHINE

3/8" X 50FT PREMIUM STEEL CABLE
4 SHAPES OF CUTTERS



Better and Safer Alternative.

sapia | South African Petroleum Industry Association



Lessons Learned: Immediate Actions

System Failures: Drain Unblocking Contract Owner

- **Management of Change** – insourcing of service and proven plumbing skills sets of work team not considered – incorporate MOC for all Service Provider Contract Closures.

Immediate Actions: Facilities Maintenance Manager

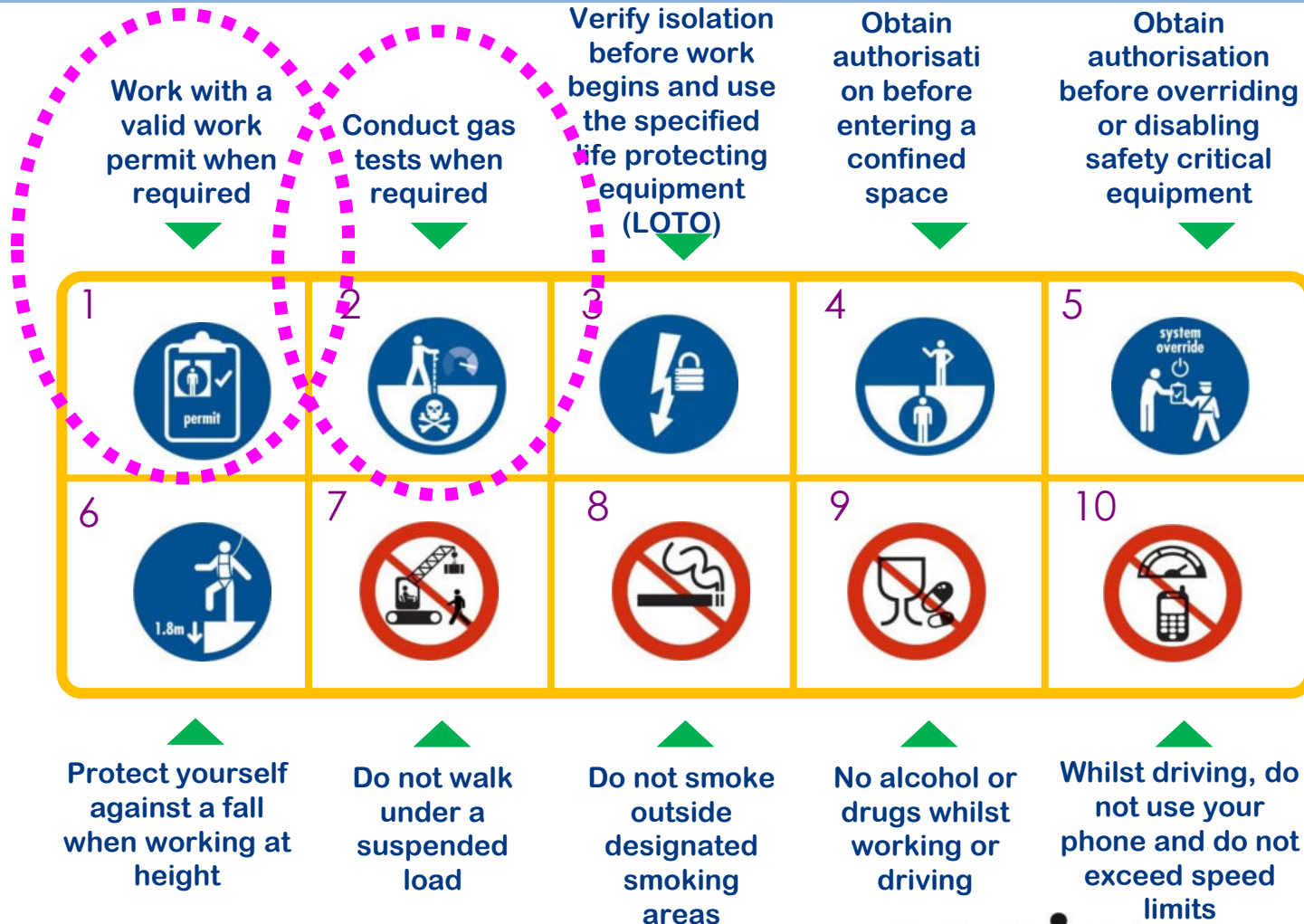
- Issue instruction that all Facilities Maintenance Staff and Supervisor receive retraining on PTW.
- Facilitate an urgent Safety Discussion (this IOD as agenda item) with entire team.

Immediate Actions: Facilities Maintenance Supervisor

- **STOP** all sewer unblocking activity.
- Method **retrain** all staff responsible for drain rodding.
- Revise Task **Risk Assessment** & **Coach** Staff. Classify drain rodding as High Risk Activity.
- Evaluate and Plan all drain unblocking requests – safer alternatives per application.
- Assign only **trained staff** to do the job.
- Perform **Toolbox Talk for each** and every drain rodding **activity** prior to execution and assignment.

Our Life-Saving Rules:

“Unsafe Acts during this LTI?”



Thank You

“Do your little bit of good where you are;
its those little bits of good
that when put together
can change the world”

Desmond Tutu