

# LFI: LTI at Drain Sewer Unblocking

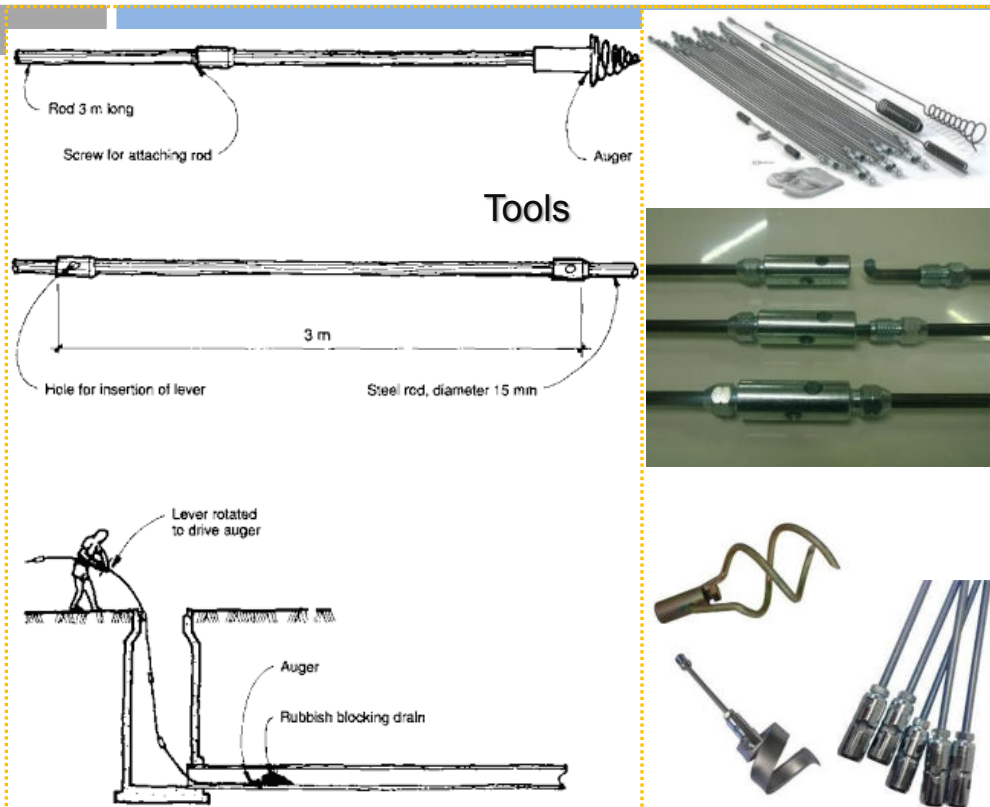


# What went Wrong?

- 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



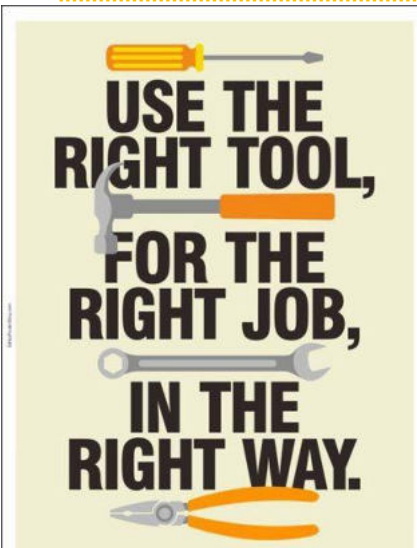
Unblocking



Slippery PVC Gloves for Twisting and Turning

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## DRAIN CLEANER MACHINE

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



Better and Safer Alternative.



# 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*

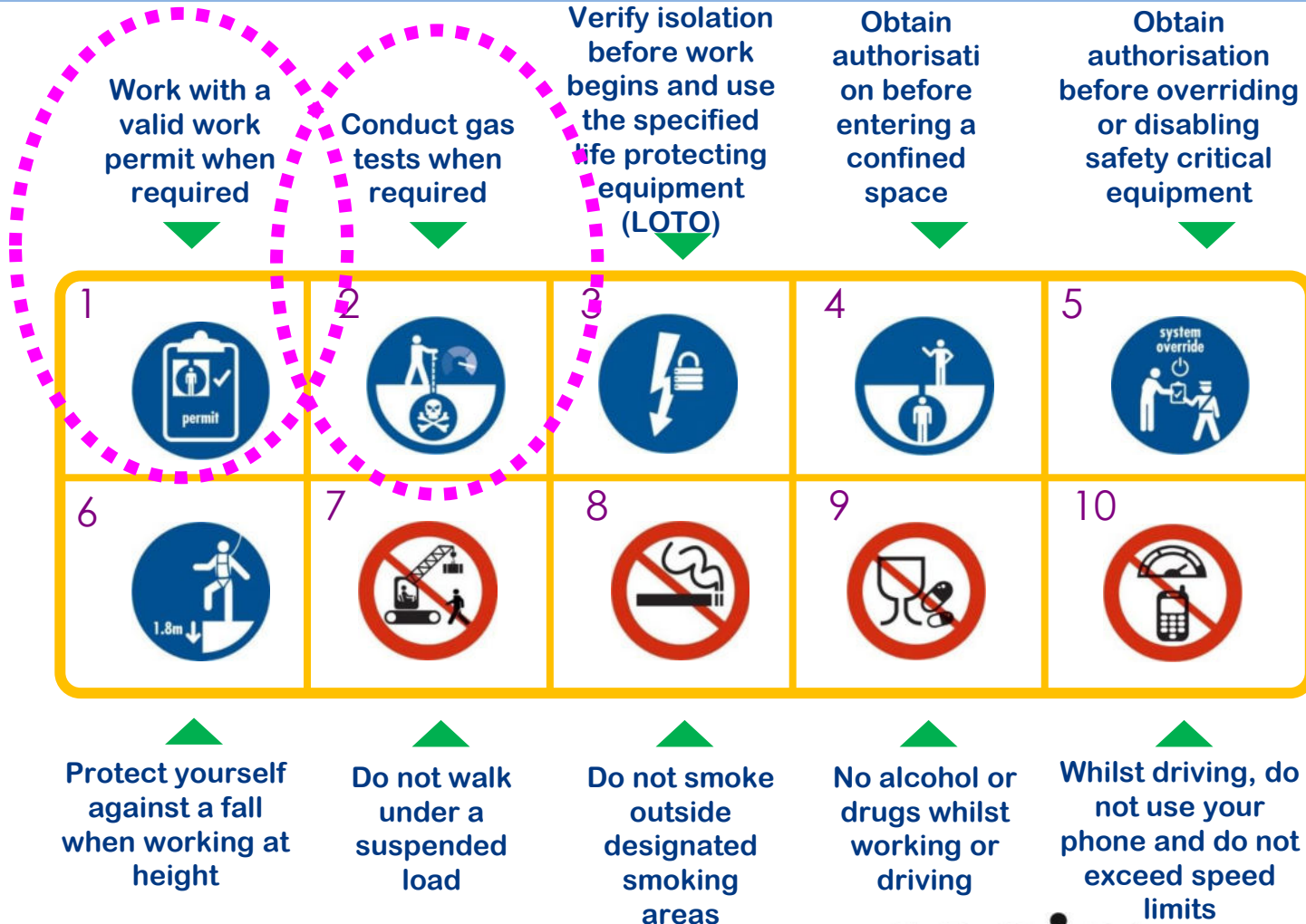
- Issue instruction that all Facilities Maintenance Staff and Supervisor receive retraining on PTW.
- Facilitate an urgent Safety Discussion (this IOD as agenda item) with entire team.

## *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

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“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