

Tiger Torch Needle Valve Failure Results in Facial Burns

Description

On July 12, 2026, a Journeymen Welder, working as a Welders Helper at a client's site, sustained burns to the face and neck when a tiger torch's needle valve blew off the handle during a routine preheating task.

The worker was wearing the appropriate PPE for the task, including a fire-retardant shirt, which limited the severity of the injury.

Immediate Corrective Actions

Work was immediately stopped and the scene was frozen. The injured worker was provided immediate care at the scene, and taken to the site medical facility where they received first aid treatment.

All propane torches were inspected that day in response to the incident. Any units showing signs of wear, age, or defects were removed and replaced with new equipment



Findings

- A propane smell had been noticed earlier and dismissed. The odor was assumed to be from a valve left open the previous day; it was closed and the smell went away — but this was not treated as a signal to inspect or remove the equipment from service.
- No pre-use inspection was performed. The propane bottle, hose, and torch valve were not formally inspected or leak-tested before the task began.
- The torch was worn from extended use and had no backout-prevention safeguard on the valve assembly — confirmed by the manufacturer as a longstanding design feature, not a defect unique to this unit.
- Confined, congested workspace. The task was performed in a tight space with limited room to move the torch away from the body once the flare occurred.

Preventative Actions

- Pre-use inspection of all tiger torch assemblies is now required — documented on the FLHA — prior to first use on an employee's first day back from scheduled days off.
- Inspection must verify the needle valve is secure, and check the torch handle, hoses, fittings, and connections for damage, wear, looseness, or leaks.
- All pressurized gas connections must be leak-tested using an approved leak-detection solution (e.g., Snoop) before the torch is placed into service.
- Any equipment found damaged, loose, or leaking must be removed from service until repaired or replaced.

For further information, please contact your region HSE advisor or hse@cedagroup.com.