

## Safety Alert

**ARTC No. 98**  
**Issued 17/08/2017**

### Maintenance of Gas Equipment

This alert has been issued following an inspection of ARTC gas cutting and heating equipment that found the equipment did not comply with the maintenance requirements set out in *AS 4839 – 2001 The safe use of portable and mobile oxy-fuel gas systems for welding, cutting, heating and allied processes*.

The attached table from AS 4839 – 2001 outlines the maintenance requirements for your portable and mobile oxy-fuel gas cutting and heating equipment.

Prior to every use, all equipment including regulators, hoses, bottles, flash back arrestors and hand pieces must be visually inspected to look for signs of damage, condition of threads and any contamination with grease and dirt.

During use and transport, ensure hoses are stored and kept away from hot exhaust systems and any abrasive surfaces where damage could occur.

#### **For your action**

1. Place Safety Alert on display and make copies of this alert available to people who report to you (without regular email access) and ensure that the contents of the safety alert are discussed/explained to your staff.
2. If engaging contractors, ensure they are made aware of current ARTC Safety Alerts.
3. Ensure a method of sign-off is obtained (eg via tool-box/safety meetings/morning briefings etc) to verify that the Safety Alert has been distributed and discussed.
4. If you have any safety concerns with this Safety Alert please speak directly to your supervisor.

#### **Further information**

- All Safety Alerts issued can be [found here](#).

Equipment	Maintenance		
	Weekly (if in constant use) or before every use (to be performed by the operator)	As nominated (to be carried out by a technically competent person)	Refurbishment or replacement intervals (Equipment condition determines whether refurbishment or replacement is required.)
1. Regulators (including their integral protective devices)	According to the manufacturer's instructions including-visual examination to determine suitability for service ( e.g. gas, pressure rating, damage); condition of threads and sealing surfaces; and oil or grease contamination. Leak test all joints at working pressure.	Six monthly: Functional tests to ensure the correct operation of internal components.	Manufacturer or supplier recommendation, but not exceeding five years.*
2. Flashback arrestors and other external devices (including non-return valves)	Visual examination to determine suitability for service (e.g. gas, pressure rating, damage); condition of threads and sealing surfaces; and oil or grease contamination. Leak test all joints at working pressure.	Yearly as detailed in AS 4603 or following a flashback: Proper functioning of the non-return valves and flashback arrestors. For pressure-activated valves, check here is no flow in the normal direction with the valve tripped.	Manufacturer or supplier recommendation, but not exceeding five years.*
3. Hose assemblies	Visual examination to determine suitability for service (e.g. gas, pressure rating, damage); condition of cover; and threads and sealing surfaces of the end fittings. Leak test all joints at working pressure.	Six monthly: Check for absence of cuts and excessive wear by bending the hose in a tight radius, to ensure reinforcement is not visible.	Determined by the hose assembly condition.
4. Blowpipes, mixers and attachments	Visual examination for damage of the threads and sealing surfaces of the hose connections and the attachment connections. Leak test all joints at working pressure.	Six monthly: Test control valve function. Blank the attachment connection and leak test for internal malfunction.	Manufacturer or supplier recommendation, but not exceeding five years.*

\* Regulator elastomers and seals will wear and deteriorate in service and deteriorate out of service. Items stored for one year or over without use should receive inspection as per the annual maintenance inspection.