

# SAFETY ALERT

## HIGH-PRESSURE WATER JETTING

This safety alert is published following a fatal incident to an operator while he was using a high-pressure water jetting lance to clean the settlement tank of a truck wash bay. The particular water jetting unit being used at the time had a maximum operating pressure of 130Mpa.

The initial investigation has revealed that the operator lost control of the lance during the cleaning process and was struck in the upper torso by a stream of high-pressure water resulting in fatal injuries.

### OCCUPATIONAL HEALTH AND SAFETY REQUIREMENTS

Employers must comply with their obligations under the Occupational Health and Safety Regulations 2001, in particular Chapter 5 – Plant. Employers are required to ensure plant is used for the purpose it was designed and to provide adequate training and supervision.

Due to the inherent risks associated with high-pressure water systems, a comprehensive risk assessment should be carried out prior to the operation of this equipment. This should be carried out by a competent person to ensure that safe systems of work are developed and implemented, taking into consideration the manufacturer's instructions and the AS/NZS 4233.1:1999 High pressure water (hydro) jetting systems Part 1: Guidelines for safe operation and maintenance.

### The control measures should consider but are not limited to the following:

- Ensure that the water jetting system is being used according to the manufacturer's specifications.
- Attachments such as lances and lance extensions should be fitted and used in accordance with the manufacturer's instructions and in a manner that will not affect the safe operation of the system.
- Operators should have safe and easy access to the work area or item they are cleaning.
- The work area should be defined and suitably cordoned off or barricaded to prevent unauthorised access.
- All systems should be "fail safe" in order to comply with the Standard. Fail safe means that the water stops immediately if the operator loses control of the hand-held gun or lance.
- The operator should have the physical capacity to handle the gun barrel or lance safely and comfortably.
- The operator should be allowed to feel the reaction force of the water jet progressively, if possible, until the required operating pressure is reached.
- When using a lance or hand-held gun the person operating the lance or gun should have direct control of the water flow.
- Ensure operators are appropriately trained in the operation of the water-jetting unit and fully instructed on the safe systems of work.
- Ensure the personal protective equipment as specified in the safe system of work is worn.
- Where water jetting is a multiple person operation, the team members should agree on a code of signals or means of communication to be used during the operation of the equipment.

**For further information please contact 13 10 50**

### **Disclaimer**

This publication may contain occupational health and safety and workers compensation information. It may include some of your obligations under the various legislations that WorkCover NSW administers. To ensure you comply with your legal obligations you must refer to the appropriate legislation.

Information on the latest laws can be checked by visiting the NSW legislation website ([www.legislation.nsw.gov.au](http://www.legislation.nsw.gov.au)) or by contacting the free hotline service on 02 9321 3333.

This publication does not represent a comprehensive statement of the law as it applies to particular problems or to individuals or as a substitute for legal advice. You should seek independent legal advice if you need assistance on the application of the law to your situation.

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