



## SAFETY ALERT FROM VICTORIAN WORKSAFE

# ELEVATING WORK PLATFORMS AND THE PLACEMENT OF GAS CYLINDERS FOR CUTTING OR WELDING

### BACKGROUND

Gas cutting and gas welding from elevating work platforms (EWP) is often done on demolition and other construction sites. Apart from some limited guidance published in the 1990s; there has been no clear current advice available on where to position gas cylinders when undertaking this work.

This guidance note provides advice on the placement of gas cylinders when gas cutting or welding from EWPs to reduce the likelihood of injury to workers.

### INITIAL ASSESSMENT

Before commencing any gas cutting or welding from an EWP, assess the situation by asking:

1. Is cutting or welding from an EWP necessary (i.e. can the task be safely undertaken at ground level)?
2. If cutting or welding from an EWP is necessary, can it be done without using gas (i.e., cold cutting or arc welding)?
3. If gas cutting or gas welding from an EWP is necessary, what is the safest method of locating and securing gas cylinders?
4. Is the EWP suitable and serviceable for the task? Either boom type or scissor lift EWPs can be used. The EWP must have sufficient capacity to hold the cylinders, equipment and operator. Also, the height and reach of the EWP must permit the operator to remain inside the confines of the platform at all times.
5. Are there sufficiently trained operators for the assigned tasks? There should be arrangements for at least one other person trained in the operation of the EWP to be readily available in an emergency. Employers must ensure that EWP operators have received sufficient training to enable them to use the particular brand and model of EWP safely. In addition, persons operating boom-type EWPs with boom lengths of 11 metres or more must hold an appropriate certificate of competency (class code WP).
6. What personal protective equipment (PPE) is needed? (Note: Flammable clothing, including types of flammable high visibility vests, should not be worn by persons involved in gas cutting or welding. Further advice on PPE can be found in AS4839).

### BEFORE POSITIONING GAS CYLINDERS ON AN EWP

1. Make sure that the gas cylinders are:
  - Upright and located away from any EWP controls.
  - Secured to withstand any lateral or vertical movement from the EWP.
  - Positioned so as not to upset the balance of the EWP.
  - The minimum size sufficient to carry out the work. Gas cylinders should not be attached to the outside of the platform unless the EWP has been specifically designed (or redesigned) for the purpose.

2. Check that the gas cylinders can be safely loaded and unloaded into the EWP.
  - The manual handling of gas cylinders into and out of the EWP can be high risk if not properly assessed and controlled.
  - If the EWP is a boom type, check to see if the platform can be lowered to ground level.
3. Inspect the work zone at the height of operation to identify any hazards for the operator, EWP and equipment.
  - The potential path of the EWP should be walked on the ground and the potential height of operations inspected for hazards.
  - Cylinders valves, gauges and regulators should not be above the height of the EWP guard railing so as to prevent mechanical damage from obstructions.
4. Maintain a sufficient separation between the operator and the gas cylinder(s).
  - Use of gas cylinders in “enclosed” EWPs (i.e., where both the walls and floors allow the gases to accumulate) is considered unacceptable because of the risk from gas vapour emissions.
  - The basket platform should be of sufficient size to permit a 1 metre clearance between the worker’s controls and the gas cylinders.
5. Ensure that fire fighting equipment is in the EWP
  - A fire blanket or extinguisher should be in an EWP when gas cylinders are on board.
6. The work practice should ensure that the worker, EWP, gas cylinders and hoses are free from falling debris
  - When oxy cutting from EWPs, care should be taken that hot slag does not drop onto cutting hoses or cylinders or any part of the EWP.

---

**ONLY IF ALL THE ABOVE FACTORS ARE CHECKED AND ADEQUATELY CONTROLLED, SHOULD GAS CYLINDERS BE LOCATED IN AN EWP.**

---

**IF THE GAS CYLINDERS ARE TO BE POSITIONED ON THE GROUND**

1. Make sure that the gas cylinders are:
  - Secured upright with regulators, valves and gauges directed away from the platform. They should be braced or secured and not free standing.
  - Located so that they can be seen by the EWP operator and are not in the path of the EWP.
  - Not a hazard to or from either the EWP or any passing traffic. This may require the use of a spotter or guarding.
2. Check that the gas cylinders can be safely moved to follow the EWP, as required.
  - Cylinders should be secured in trolleys for manual handling.
  - To avoid damage to equipment, hoses should be disconnected and contained in the platform whilst travelling and should be reconnected to the cylinders once the EWP is stationary again.
3. Ensure that the length of cylinder hose can easily accommodate the height range of operation
  - The intended path of the EWP should be walked on the ground and the intended height of operations inspected to ensure that the hoses will be of satisfactory length. Clause 6.5 of AS 4839-2001 recommends that hoses not exceed 15m in total length. However WorkSafe is aware that it is not uncommon for 30m lengths to be used as necessary in demolition and other construction tasks.
  - On this issue, WorkSafe accepts the use of hoses greater than 15 m in length where work is done in accordance with this document.

- The proposed manner and area of operation of the EWP should be assessed to ensure that the hoses will not become snagged on obstructions or from the raising or lowering of the EWP.
4. Check that fire fighting equipment is readily available.
    - Fire fighting equipment may consist of a fire blanket or extinguisher.
  5. Make sure that the cutting or welding is not going to create a hazard.
    - Care should be take that hot slag does not drop onto cutting hoses or cylinders or any part of the EWP.

**ONLY IF ALL OF THE ABOVE FACTORS ARE CHECKED AND ADEQUATELY CONTROLLED, SHOULD GAS CYLINDERS BE LOCATED ON THE GROUND IN SUPPORT OF AN EWP WORK PRACTICE.**

**PREVIOUSLY PUBLISHED GUIDANCE**

AS 2550.10 – 1994, Clause 9.13 states “Where gas cylinders are to be carried on an elevating work platform, the cylinders shall be adequately secured. Only the minimum quantity of gas sufficient to carry out the work should be transported. Not more than one ‘D’ size cylinder of gas should be transported at any time. A minimum separation of 1 m shall be possible between personnel and cylinders. Fusible plugs shall be directed away form the platform and a fire protection blanket in conformance with AS 3504 shall be carried”.

WorkSafe’s 1991 Code of Practice – (no 14) Demolition, Clause 15.3 states “Oxy cutting bottles should not be carried in the platforms of boom type EWPs due to the dangers of fire. When oxy cutting from EWPs, care should be taken that hot slag does not drop onto cutting hoses or bottles or onto any part of the EWP vehicle. When using oxy bottles in scissor lifts, the bottles should be secured in the uprights position at the opposite end form the platform controls. A fire extinguisher should be in the scissors lift at all times when cutting...(Note: When gas and oxy is being used in a boom type platform, a nominated person must be readily available to turn off bottles in case of an emergency at all times)”.

Since publication of this Code of Practice, boom-type EWPs with much larger baskets have become available. Therefore, as noted earlier, WorkSafe now accepts that boom-type EWPs that can provide at least a 1 metre clearance between the controls and the cylinders may be considered for use with the gas cylinders in the basket, provided its sides and floor are not “enclosed” so as to allow gases to accumulate.

**FURTHER INFORMATION**

*Acts and Regulations – Victorian - Occupational Health and Safety Act 2004, Occupational Health and Safety (Manual Handling) Regulations 1999*

Acts and regulations are available from Information Victoria on 1300 366 356 or order online at [www.bookshop.vic.gov.au](http://www.bookshop.vic.gov.au).

If you only want to view the legislation you can use the Parliament of Victoria web site; go to [www.dms.dpc.vic.gov.au](http://www.dms.dpc.vic.gov.au), click on “Victorian Law Today” and scroll down to the “Search” window.

**PRINT THIS LEAFLET AND PLACE IT ON YOUR NOTICE BOARD AT WORK**



Authorised by Dick Whitehead, Safety Officer, CFMEU (Construction & General Division) NSW Branch  
12 Railway Street, Lidcombe NSW 2141 Ph: (02) 9749 0400  
Email: [dwhitehead@nsw.cfmeu.asn.au](mailto:dwhitehead@nsw.cfmeu.asn.au); Web: [www.cfmeu-construction-nsw.com](http://www.cfmeu-construction-nsw.com)  
Your Rights At Work website - <http://www.rightsatwork.com.au/>  
Tune in to Workers Radio Sydney 88.9FM Weekdays 5:30am – 9:00am