

# Plant & Truck Issues

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## 1) Traffic Management

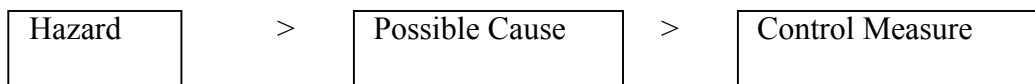
Must conform to Australian Standards

### AS 1742.3 Traffic Control Devices for works on Roads

Provide for the safe movement of traffic and the protection of persons and property through and/or around the work site.

- Traffic Management Plan
- Authorised Traffic Controllers
- Approved Clothing for all Work Personnel on the work site
- Signage
- Barriers
- Markings
- Temporary Speed Zoning

### HAZARD IDENTIFICATION & RISK CONTROL



### VEHICLE MOVEMENT ON SITE

- Volume & Type of Traffic considered to determine –
  - Amount of road and/or footpath space to remain open, and where applicable
  - Times of day when greater amounts of space are required
- Type of traffic routing assessed
- Type of traffic control assessed
- Proximity to Traffic Lights
- Is special lighting required?

- Has the positioning of cones and early warning signs been assessed?
- Has training been provided to employees working on roads, including-
  - Wearing appropriate personal protective and safety equipment
  - Being properly located
  - Communicating effectively
  - Assessing changes in traffic patterns
  - Emergency procedures
- Adequate maintenance of records

***PLANT AND EQUIPMENT***

During the Day, Plant & Equipment working in a position adjacent to traffic and having a projection beyond the normal width of the item (eg Grader Blade) shall have a fluorescent red flag attached to the outer edge of the projection.

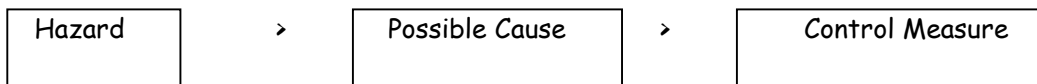
During poor light conditions or at night, an additional traffic controller with an illuminated red wand shall direct traffic around such plant & equipment.

At night, where traffic is permitted to use the whole or portion of the existing road, all plant items and similar obstructions shall be removed from the path of vehicles, to provide a lateral clearance of at least 6m where practicable, with a minimum clearance of 1.2m.

**Plant & Equipment, within 6m of the normal path of vehicles, shall be lit by not less than two yellow steady lamps suspended vertically from the point of the obstruction nearest to a traffic lane, and one steady lamp at each end of the obstruction on the side furthest away from the traffic lane.**

**2) Working Safely with Plant**

***HAZARD IDENTIFICATION & RISK CONTROL***



- Foreseeable Hazards from the operation of the Plant assessed including:
  - Contact or entanglement with the machinery or materials
  - Being trapped between machine and any material or fixed structures
  - Being struck by ejected material from the machinery
  - Noise and vibration from the machinery
  - Release of potential energy
  - Underground / Overhead Utilities

- Design limitations of machine assessed, with regard to the intended use of the machine
- Have the consequences of reasonably foreseeable misuse or malfunction been assessed?
- Has a schedule of inspection, maintenance, repair and cleaning been developed for all plant/equipment?
- Are records kept of inspection, maintenance, repair and cleaning of plant/equipment?
- Were risk assessments carried out on any modification to plant/equipment and the results of the risk assessment taken into account in the final modification?
- Have all operators of plant/equipment received appropriate training, hold certificates of operation, and have demonstrated their competence to operate the plant/equipment?
- Are records kept to show that all operators have received appropriate training and instruction

## Minimum Plant Equipment Requirements

Plant Item	Amber Rotating Beacon	Brake Lights & Turn Signals	Headlights, Tails Lights & Clearance Lights	Rear Reflectors	Rear & Side Reflective Tape	Rear Vision Mirrors(s)	Horn	Reverse or Travel Alarm	Neutral Start
Backhoe loader	Yes	Yes	Yes <sup>1</sup>	Yes	No	Yes	Yes	Yes	Yes
Compactor	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes
Dozer	Yes	No	No	Yes	Yes <sup>3</sup>	Yes	Yes	Yes	Yes
Excavator	Yes	No	No	Yes	Yes <sup>3</sup>	Yes	Yes	Yes	Yes <sup>4</sup>
Grader	Yes	Yes	Yes <sup>1</sup>	Yes	No	Yes	Yes	Yes	Yes <sup>4</sup>
Lime spreader	Yes	Yes	Yes <sup>1</sup>	Yes	No	Yes <sup>5</sup>	Yes <sup>5</sup>	Yes <sup>5</sup>	Yes
Loader	Yes	Yes	Yes <sup>1</sup>	Yes	No	Yes	Yes	Yes	Yes
Multi tyred roller	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes
Padfoot roller	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes
3-point roller	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes
Paver	Yes	No	No	No	Yes <sup>2</sup>	Yes	Yes	Yes	Yes
Profiler	Yes	No	No	No	Yes <sup>2</sup>	Yes	Yes	Yes	Yes
Scraper	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes
Skid steer loader	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes <sup>4</sup>
Smooth drum roller	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes
Soil Stabiliser	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes
Sweeper	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
Tandem drum roller	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes
Tractor	Yes	Yes	Yes <sup>1</sup>	Yes	No	Yes	Yes	Yes	Yes <sup>4</sup>
Water tanker	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes <sup>4</sup>

**Notes applying to table:**

1. Only required if plant item is on full 24-hour registration.
2. Only if no rear reflectors, brake lights or turn signals.
3. Only if no rear reflectors.
4. Neutral start switches must operate on all transmissions other than manual gearboxes fitted with a mechanical type clutch. Excavators and skid steer loaders are exempt from the normal type of neutral start switch. However, all original type safety / hydraulic locks must operate correctly and travel levers must self-centre to the neutral position.
5. Where applicable.

### **3) Long Term Hire versus Purchase**

***The QUESTION***

When do we identify and reduce Capital Costs?  
Alternatively, When do we identify Opportunity costs for Capital Outlays?

***Making the DECISION***

Best means of decision making –

***‘Comparative Advantage Concept’***

Concentrate efforts in areas where competitive advantage is identified and negotiate with others in areas where it is not.

Specifically in this instance, Own where you have the capability and capacity, considering:

- Baseline workload
- Essential requirements
- Strategic Requirements
- Necessity for Local Market Price Regulation

and hire specialist or supplementary plant above this minimum.

***OWNERSHIP***

***Prior to purchase or replacement***

Ensure acquisition of plant is economically viable

- Consider in-service reliability, potential usage, past utilisation figures, cost and frequency of hire of items currently not within own system.
- Most effective items
- Monitor changing work practices
- Equipment fit-for purpose (add value to service), reliable and efficient (all support processes in place)

## **During ownership**

### Pricing

- Rates competitive with external resources
- Ensure whole-of-life cost recovery

### Policies

- Overhead costs correctly attributed
- Availability maximised –
  - timely and effective maintenance & repair
- Analysis of market trends –
  - maximise returns on disposal
- Maximise Utilisation –
  - spread the fixed component of the ownership cost over a greater number of worked hours will decrease the hire rate

## ***HIRE***

Need to ensure that Procedures meet requirements for tendering of section 55 of Local Government Act AND that plant meets requirements set down by WorkCover, RTA etc.

## ***RESOURCE SHARING***

### ***Practice Note 12 : Resource Sharing for Local Government (1995)*** ***ISSN 1320-6788***

#### **Department of Local Government**

Encourages sharing of resources between local government bodies and consideration to sharing resources with Statutory Bodies with specialised plant & expertise.

### Other Examples

- Memorandum of Understanding (Plant Resources) RTA Fleet Services, NPWS and State Forests of NSW
- Reciprocal Arrangement RTA Fleet Services and Queensland Main Roads Plant Hire Services

### Advantages of Resource Sharing

- Reduced Risk
- Spread ownership costs
- Better utilisation of existing 'Government' resources
- Allows financial savings in service delivery