



# SAFETY FACT SHEETS

## Working with and around High Risk Plant Safety Non Negotiable

G-HS-ST-00741 Working with and around High Risk Plant



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## Safety Non-Negotiables (SNN)

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Zinfra Group is committed to providing a safe workplace in line with our number one company value – Health, Safety and the Environment. To bring this value to life, our strategy is to directly manage critical hazards through Safety Non-Negotiables (SNN's) and systematically manage other safety risks.

All employees and vendors (whether suppliers, subcontractors or consultants) need to consistently apply the relevant controls stipulated on these SNN's across all Zinfra Group controlled sites. Any deviation from these SNN's will require a documented risk assessment with approval of the direct manager and HSEQ manager.



## Definition – Working with and around High Risk Plant

Any work activity performed near or using High Risk Plant including cranes (mobile, truck mounted, gantry), excavators, elevated work platforms (boom, scissor, knuckle), forklifts and other plant determined as 'high risk' following a Risk Assessment.





## Working with or around high risk plant - examples

Work that may involve High Risk Plant includes:

- Trenching and Excavating
- Working at height using Elevated Work Platforms
- Using Cranes
- Using forklifts
- Drilling





## SNN Requirements

### **Item 1: Must have and follow the Safe Work Method Statement**

#### ***Do you understand the hazards and risks with the work?***

The most significant risk of using High Risk Plant is a Fatality.

This may occur by:

- Being struck by the moving plant.
- Failure of the plant.
- Rollover of the plant.
- Plant collision.

Over the 10 year period from 2003 to 2012, 101 fatalities were a result of Self – propelled plant, including Front-end loaders & other loading plant (32) and Excavators, backhoes, other digging plant (25).

*(Source: Safe Work Australia – Work-related Traumatic Injury Fatalities, Australia 2012)*

#### ***What Safe Work Method Statements (SWMS) are relevant?***

#### ***Are all the controls in the SWMS in place?***

#### ***Is there anything unsafe that should be raised with your supervisor?***



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# SNN Requirements

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## Item 2: Only operate high risk plant with the relevant licence

Operators of high risk plant must hold the applicable and valid 'licence to perform high risk work'.

Other high risk plant that does not require a 'licence to perform high risk work', but still requires evidence of training includes:

- Front End Loader
- Backhoe
- Excavator
- Skid Steer
- Roller
- Grader
- Boom Type elevating work platform under 11 metres
- Scissor Lift
- Telescopic Forklift under 3 Tonnes capacity
- Drilling or Piling Rig
- Vehicle mounted cranes



## SNN Requirements

### **Item 3: Only operate high risk plant after verification of competency**

All operators must have their competency verified (VOC) for the specific high risk plant they may be operating.





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## SNN Requirements

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### **Item 4: Keep the plant risk assessment, operator's manual and safe operating instructions with the high risk plant**

All high risk plant must have an operation manual and a SWMS or safe operating instruction that considers the plant risk assessment available to the operator.

A documented plant risk assessment must be conducted and made available to the operator.





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## SNN Requirements

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### **Item 5: Operate high risk plant according to manufacturer's requirements**

All high risk plant must be operated according to the manufacturer's instructions and specifications.

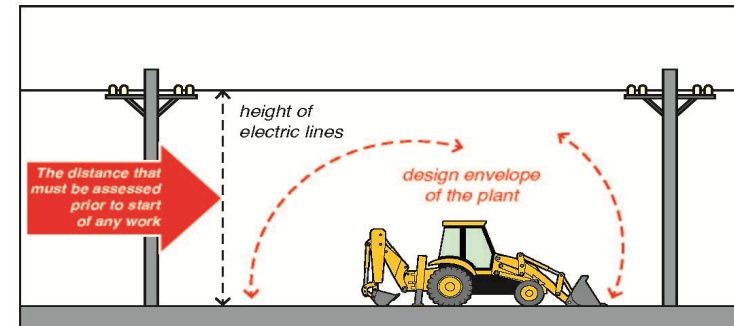
The use of an item of plant outside its designed capability or reckless misuse will be regarded as a serious safety breach and will result in disciplinary action, including potential termination of employment.



# SNN Requirements

## Item 6: Locate overhead power lines and maintain safe clearance distances

Before operating high risk plant, a worksite inspection must be conducted to identify overhead electrical lines or other associated electrical equipment.



Maintain safe approach distance

Nominal phase to phase a.c. voltage (volts)	Approach distance (metres)
Up to and including 132,000	3.0
Above 132,000 up to and including 330,000	6.0
Above 330,000	8.0
Nominal pole to earth d.c. voltage (volts)	Approach distance (metres)
Up to and including +/- 1500 Volts	3.0
Nominal phase to phase a.c. voltage (volts)	Approach distance (metres)
Up to and including 132,000	3.0

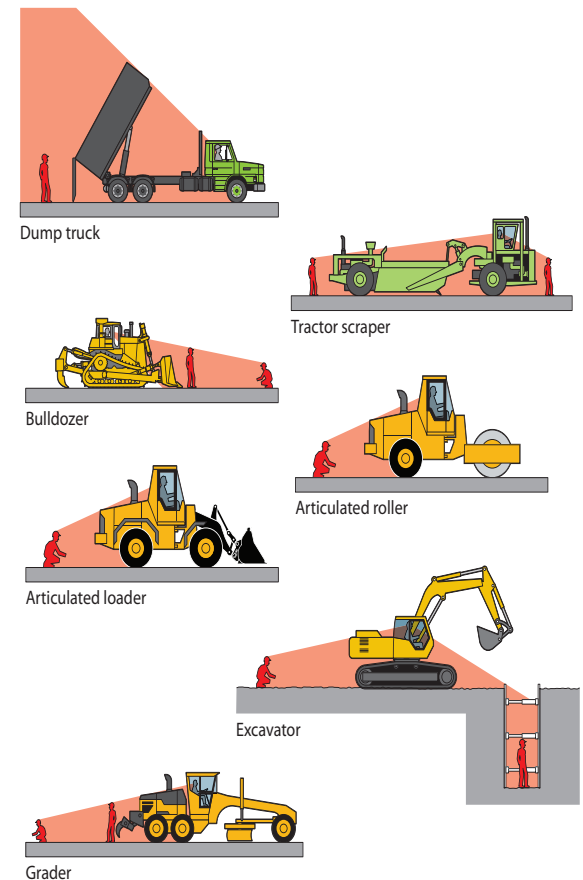


# SNN Requirements

## Item 7: Set up high risk plant operating exclusion zones, identify blind spots and communicate these locations to all site workers

Plant operating exclusion zones must be established and communicated to relevant personnel.

Operators and ground workers should be made familiar with the blind spots of particular items of plant being used. Exclusion zones, communication protocols, high visibility clothing and equipment warning devices all assist with controlling the danger of blind spots.





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# SNN Requirements

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## **Item 8: Conduct a daily plant pre-start check**

All operators must conduct a documented daily pre-start check specific to the piece of plant.

Any defects impacting the safe operation of the plant must be immediately rectified or plant withdrawn from services and locked out / tag out until the necessary repairs are completed.



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# SNN Requirements

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## **Item 9: Establish communication methods for operating high risk plant**

A protocol to approach the plant must be established between the relevant work crew and communicated to all persons.

The operator must ensure that personnel assisting with the task are fully briefed on the plan for completing the task, including review and signed onto the SWMS, briefing on the order of activities including the intended direction of plant travel / slewing, no-go zones and the agreed communication system (e.g. two-way radio, verbal, hand signals etc.)



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## SNN Requirements

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**Item 10: Only enter a high risk plant operating exclusion zone after approval from the operator or spotter/safety observer**

Plant operating exclusion zones must be established and communicated to relevant personnel.

No person must enter the plant operating exclusion zones without authorisation from the spotter or operator. A protocol to approach the plant must be established between the relevant work crew and communicated to all persons.



## SNN Requirements

### **Item 11: Do not use mobile phones in the high risk plant operating exclusion zone**

Mobile phones (whether hands free or not) must not be used when operating high risk plant and/or by any ground worker positioned within the plants operating exclusion zone.





## SNN Requirements

### Item 12: Wear a seat belt (where fitted)

Seat belts must be worn (where fitted) when the plant is in use.

