

STEP 3: FORM GUIDANCE

Guide to completing the Plant Risk Assessment Form

Introduction.

This guidance note has been prepared to assist you complete the Plant Risk Assessment. The form has the following columns and meaning:

Reference number: this number shall be used to enable each row to be identified

Hazards: these are taken from the relevant legislation, codes of practice etc. so as to address all relevant risks

Potential Hazard: this column shall identify if the hazard included in the same row is possible (Yes) not possible (No) or not applicable (N/A)

Hazard Location: this section shall identify on separate lines, the specific locations of each relevant hazard listed for the plant

Initial risk class: this risk assessment, undertaken before any control is considered, shall use the “*Risk Assessment Matrix*” (above) to determine the level of risk; this number shall be included in this cell, for example M9.

Plant condition control: This is the desired control as it confirms the manufacturer of the plant has identified a hazard in operating or servicing the plant and added or included a control on the plant, for example a lock out that prevents contact with moving parts, load limiting device that prevents operation outside of pre-set load limits etc.

Operator/procedural control: this form of control relies on the individual operation the plant to follow procedures to prevent injury or illness during operation. A control in this cell will require constant monitoring to ensure operator or maintainer follows the specific procedures (SWMS) at all times. This type of control is only deemed as a hierarchy of control measure 5. Administration; or 6. PPE (Personal Protective Equipment), as set out in the “*Risk Assessment Matrix*” (above)

Residual risk class: This assessment, undertaken after a plant condition and/or operator/procedural control has been selected. This shall use the “*Risk Assessment Matrix*” (above) assess the level of risk based on the selected control being applied. A plant condition control will include 1. Elimination; or 2. Substitute; or 3. Isolate; or 4. Redesign as set out in the “*Risk Assessment Matrix*” (above).

Acceptable: this cell will conform that the selected plant condition control or operator/procedural control has been deemed acceptable to the authorised person and they should initial in the box. If it is deemed not acceptable the control must be reviewed and revised so as to be deemed acceptable before proceeding with the operation of the plant at the workplace.

STEP 4: PLANT RISK ASSESSMENT

Ref No	Hazard	Potential Hazard (Yes / No N/A)	Hazard location	Initial risk class	Plant condition control	Operator/ procedural control	Residual risk class	Acceptable (Yes/No)
1.0	Entanglement: Can anyone's hair, clothing, gloves, neck tie, jewellery, cleaning brushes, rags or other materials become entangled with moving parts of plant, or materials in movement?	Yes	Engine Winch	M8	Guards Warnings Signage Barricades Permits / Licence	Training competency Licence. OJT. Operators manual SWMS	M11	Yes
2.0	Crushing: Can anyone be crushed due to:							
2.1	Material falling off the plant?	Yes	Crane Deck Slinging loads Lifting loads Landing loads	M9	Guards Warnings Signage Barricades Servicing Permits / Licence	Training competency Licence. OJT. SWMS	M12	Yes
2.2	Uncontrolled or unexpected movement of the plant or its load?	Yes	Slinging loads Lifting loads Landing loads Weather Conditions	M8	Warnings Pre start checks Barricades Servicing Permits / Licence	Training competency Licence. OJT. Operators manual SWMS	M11	Yes
2.3	Lack of Capability for the plant to be slowed, stopped or immobilised?	Yes	Slinging loads Lifting loads Landing loads Weather Conditions	H5	Warnings Signage Barricades Servicing / Pre start Permits / Licence	Training competency Licence. OJT. Operators manual SWMS	M8	Yes
2.4	The plant tipping over, adequate ROPS & FOPS?	Yes	Slinging loads Lifting loads Landing loads Ground Conditions	M8	Guards Warnings Barricades Servicing Permits / Licence	Training competency Licence. OJT. Operators manual SWMS	M11	Yes
2.5	Parts of the plant collapsing?	Yes	Slinging loads Lifting loads Landing loads	M8	Warnings Signage Barricades Servicing	Training competency Licence. Operators manual SWMS	L14	Yes

2.6	Coming in contact with moving parts of the plant during testing, inspection, operation, maintenance?	Yes	Slinging loads Lifting loads Landing loads Service / Inspection	H5	Guards Warnings Signage Permits / Licence	Training competency Licence. OJT. Operators manual SWMS	M8	Yes
2.7	Being thrown off or under the plant?	Yes	Slinging loads Lifting loads Landing loads Ground Conditions	M9	Guards / Doors Warnings Signage Barricades	Training competency Licence. OJT. Operators manual SWMS	M12	Yes
2.8	Being trapped between the plant and materials or fixed structures?	Yes	Slinging loads Lifting loads Landing loads Crane Set up / Pack up.	M9	Guards Warnings Signage Barricades	Training competency Licence. OJT. Operators manual SWMS	L14	Yes
2.9	Other factors not mentioned?	No						
3.0	Cutting, stabbing and puncturing: Can anyone be cut, stabbed or punctured due to:							

3.1	Coming in contact with sharp or flying objects?	Yes	Slinging loads Lifting loads Landing loads Servicing / Maintenance	M9	Warnings Signage Barricades Guards	Training competency Licence. OJT. Operators manual SWMS	M12	Yes
3.2	Coming in contact with moving parts of the plant during testing, inspection, operation, maintenance, cleaning or repair of the plant?	Yes	Slinging loads Lifting loads Landing loads Service / Inspection	M2	Guards Warnings Signage Barricades Permits / Licence	Training competency Licence. OJT. Operators manual SWMS	L14	Yes
3.3	The plant, parts of the plant or work pieces disintegrating?	Yes	Slinging loads Lifting loads Landing loads Service / Inspection	M12	Guards Warnings Signage B Servicing Permits / Licence barricades	Training competency Licence. OJT. Operators manual SWMS	L14	Yes
3.4	Work pieces being ejected?	Yes	Slinging loads Lifting loads Landing loads Service / Inspection	M9	Guards Warnings Signage Barricades Servicing Permits / Licence	Training competency Licence. OJT. Operators manual SWMS	M12	Yes
3.5	The mobility of plant?	Yes	Slinging loads Lifting loads Landing loads Service / Inspection	M12	Guards Warnings Signage Barricades Servicing Permits / Licence	Training competency Licence. OJT. Operators manual SWMS	L14	Yes
3.6	Uncontrolled or unexpected movement of the plant?	Yes	Slinging loads Lifting loads Landing loads Weather Conditions. Ground Conditions.	H5	Guards Warnings Signage Barricades Servicing Permits / Licence	Training competency Licence. OJT. Operators manual SWMS	M8	Yes
3.7	Other factors not mentioned?							
4.0	Shearing: Can anyone's body parts be sheered between two parts of the plant, or between a part of the plant and a work piece	Yes	Slinging loads Lifting loads Landing loads Crane Deck	M12	Guards Warnings Signage Barricades	Training competency Licence. OJT. Operators manual	L14	Yes

	or structure?				Servicing	SWMS		
5.0	Friction: Can anyone be burnt due to contact with moving parts or surfaces of the plant, or material handled by the plant?	No						
6.0	Striking: Can anyone be struck by moving objects due to:							
6.1	Uncontrolled or unexpected movement of the plant or material handled by the plant?	Yes	Slinging loads Lifting loads Landing loads	M8	Guards Warnings Signage Barricades Servicing Permits / Licence	Training competency Licence. OJT. Operators manual SWMS	M11	Yes
6.2	The plant, parts of the plant or work pieces disintegrating?	Yes	Slinging loads Lifting loads Landing loads Servicing / Maintenance	M9	Guards Warnings Signage Barricades Servicing Permits / Licence	Training competency Licence. OJT. Operators manual SWMS	L14	Yes
6.3	Work pieces being ejected?	Yes	Slinging loads Lifting loads Landing loads	M9	Guards Warnings Signage Barricades Servicing Permits / Licence	Training competency Licence. OJT. Operators manual SWMS	L14	Yes
6.4	Mobility of the plant?	Yes	Slinging loads Lifting loads Landing loads	H5	Guards Warnings Signage Barricades Servicing Permits / Licence	Training competency Licence. OJT. Operators manual SWMS	M8	Yes
6.5	Other factors not mentioned?							

7.0	High pressure fluids: Can anyone come into contact with fluids under high pressure, due to plant failure or misuse of plant?	Yes	Crane Deck	M9	Guards Warnings Signage Barricades Servicing Permits / Licence	Training competency Licence. OJT. Operators manual SWMS	M12	Yes
8.0	Electrical: Can anyone be injured by electric shock or burns due to:							Yes
8.1	The plant contacting live electrical conductors?	Yes	Slinging loads Lifting loads Landing loads	H5	Guards Warnings Signage Barricades Servicing Permits / Licence	Training competency Licence. OJT. Operators manual SWMS	M8	Yes
8.2	The plant working in close proximity to electrical conductors?	Yes	Slinging loads Lifting loads Landing loads	H5	Guards Warnings Signage Barricades Servicing Permits / Licence	Training competency Licence. OJT. Operators manual SWMS	M8	Yes
8.3	Overload of electrical circuits?	No						
8.4	Damaged or poorly maintained electrical leads or cables?	Yes	Crane deck / Structure	M9	Guards Warnings Signage Barricades Servicing Permits / Licence	Training competency Licence. OJT. Operators manual SWMS	M12	Yes
8.5	Damaged electrical switches?	Yes	Crane deck / Cab Structure	M12	Guards Warnings Signage Barricades Servicing Permits / Licence	Training competency Licence. OJT. Operators manual SWMS	L14	Yes
8.6	Water near electrical equipment?	Yes	Crane deck / Cab Structure Slinging loads Lifting loads Landing loads Weather Conditions.	M8	Guards Warnings Signage Barricades Servicing Permits / Licence	Training competency Licence. OJT. Operators manual SWMS	M12	Yes

			Ground Conditions.					
8.7	Lack of isolation/ out of service procedures?	Yes	Crane deck / Cab Structure	M9	Guards Warnings Signage Barricades Servicing Permits / Licence	Training competency Licence. OJT. Operators manual SWMS	L14	Yes
8.8	Other factors not mentioned?							
9.0	Explosion: Can anyone be injured by explosion of gasses, vapours, liquids, dust or other substances, triggered by the operation of plant or by material handled by plant?	No						
10.0	Slipping, tripping and falling: Can anyone using the plant, or in the vicinity of the plant, slip, trip or fall due to:							
10.1	Uneven or slippery work surfaces?	Yes	Crane set up area. Work location. Site conditions.	M9	Guards Warnings Signage Barricades	Training competency Licence. OJT. Operators manual SWMS	M12	Yes
10.2	Poor housekeeping e.g. Swarf in the vicinity of the plant, spillage not cleaned up?	Yes	Crane set up area. Work location. Site conditions.	M9	Guards Warnings Signage Barricades Servicing	Training competency Licence. OJT. Operators manual SWMS	M12	Yes
10.3	Obstacles being placed in the vicinity of the plant?	Yes	Crane set up area. Work location. Site conditions.	M9	Guards Warnings Signage Barricades Permits / Licence	Training competency Licence. OJT. Operators manual SWMS	M12	Yes
10.4	Other factors not mentioned?							
11.0	Falls from height: Can anyone fall from height due to:							
11.1	Lack of proper work platform?	Yes	Crane Deck Work Area Site Conditions	M8	Guards Warnings Signage Barricades	Training competency Licence. OJT. Operators manual	M11	Yes

					Design Permits / Licence Req's	SWMS		
11.2	Lack of proper stair or ladder access to plant and areas for servicing, maintenance or repair?	No						
11.3	Lack of guardrails or other suitable edge protection for all areas where access is required, including servicing, maintenance or repair?	No						
11.4	Unprotected holes, penetrations or gaps in the working surface or pathways?	Yes	Crane set up area. Work location. Site conditions.	M9	Guards Warnings Signage Barricades Permits / Licence Reqs	Training competency Licence. OJT. Operators manual SWMS	M12	Yes
11.5	Poor floor or walking surfaces such as the lack of a slip-resistant surface or uneven or irregular sized objects used to provide access?	Yes	Crane set up area. Work location. Site conditions.	M9	Guards Warnings Signage Barricades Permits / Licence	Training competency Licence. OJT. Operators manual SWMS	M12	Yes
11.6	Steep walking surfaces?	Yes	Crane set up area. Work location. Site conditions.	M12	Guards Warnings Signage Barricades Permits / Licence	Training competency Licence. OJT. Operators manual SWMS	L14	Yes
11.7	Collapse of the supporting structure including angle of repose for location of plant on embankment or spoil heaps?	Yes	Crane set up area. Work location. Site conditions.	M9	Guards Warnings Signage Barricades Permits	Training competency Licence. OJT. Operators manual SWMS	M12	Yes
11.8	Other factors not mentioned?	NA						
12.0	Ergonomic: Can anyone be injured due to:							
12.1	Poorly designed seating?	No						
12.2	Repetitive body movement?	No						
12.3	Constrained body posture or the need for excessive effort?	No						
12.4	Design deficiencies causing mental or psychological effort?	No						

12.5	Inadequate or poorly placed lighting?	Yes	Work location. Site conditions.	M13	Plant Design Warnings Signage	Training competency Licence. OJT. Operators manual SWMS	L15	Yes
12.6	Lack of consideration given to human error or human behaviour?	Yes	Crane structure Work location. Site conditions.	M13	Plant Design Warnings Signage	Training competency Licence. OJT. Operators manual SWMS	L15	Yes
12.7	Mismatch of the plant with human traits and natural limitations?	Yes	Crane structure	M12	Plant Design Warnings Signage	Training competency Licence. OJT. Operators manual SWMS	L14	Yes
12.8	Other factors not mentioned?							
13.0	Suffocation: Can anyone be suffocated due to lack of oxygen or atmospheric contamination?	Yes	Crane set up area. Work location. Site conditions.	M12	Plant Design Warnings Signage	Training competency Licence. OJT. Operators manual SWMS	L14	Yes
14.0	High temperature: Can anyone come in contact with objects at high temperature?	Yes	Crane set up area. Work location. Site conditions.	M13	Plant Design Warnings Signage	Training competency Licence. OJT. Operators manual SWMS	L15	Yes
14.1	Can anyone be injured by fire?	N/A						
15.0	Temperature (thermal comfort) Can anyone suffer ill-health due to exposure to high or low temperature?	Yes	Crane set up area. Work location. Site conditions.	M9	Plant Design Warnings Signage Servicing	Training competency Licence. OJT. Operators manual SWMS	M12	Yes
16.0	Chemicals: Can anyone be affected by substances on or in the plant?	Yes	Crane structure	M13	Plant Design Warnings Signage Servicing MSDS sheets / Information	Training competency Licence. OJT. Operators manual SWMS	L15	Yes
17.0	Toxic gasses, vapours or fumes: Can anyone be affected	No						

	as a consequence of operating the plant?							
17.1	Is there sufficient ventilation in operator cabin to prevent harmful contaminants and airborne particles getting into the breathing zone of the operator or other persons in vicinity?	Yes	Crane Structure	M13	Plant Design Warnings Signage Servicing	Training competency Licence. OJT. Operators manual SWMS	L15	Yes
17.2	Can fumes from the plant affect persons on or near plant?	Yes	Crane cab Drivers cab Crane structure	M13	Plant Design Warnings Signage Servicing	Training competency Licence. OJT. Operators manual SWMS	L15	Yes
18.0	Dust: Can the operator be exposed to dust in his breathing zone operating the plant?	Yes	Crane cab Drivers cab Crane structure	M13	Plant Design Warnings Signage Servicing	Training competency Licence. OJT. Operators manual SWMS	L15	
19.0	Noise:							
19.1	Can the operator of the plant be exposed to excessive noise, for example 85Db(A) for 8 hour operation?	No						
19.2	Can other workers in the vicinity of the plant be exposed to excessive noise for example 85Db(A) for 8 hours	No						
20.0	Vibration: is the worker subjected to whole body vibration whilst operating this piece of plant?	No						
21.0	Radiation: Are there any sources of radiation, i.e. lasers etc. affixed to the plant or is the operator exposed to unwanted risk of radiation from the plant?	No						
22.0	Controls and labels: Are controls, measures, labels, symbols, manuals etc. written in English and include Australian measures and Australian address	Yes	Crane cab Drivers cab Crane structure	M9	Plant Design Warnings Signage Servicing Operators Manual	Training competency Licence. OJT. Operators manual SWMS	M12	

“ I, the undersigned confirm that 1. The RAR Plant Risk Assessment and relevant Legislation /Codes of Practice to this task has been explained to me 2. The contents are clearly understood by me 3. My qualifications are current to undertake this activity 4. I have been consulted in the preparation of the Risk Assessment and 5. I will comply with the Risk Assessment otherwise work will stop immediately 6. I will alert my supervisor if I believe I am not trained adequately to undertake any tasks”.