

Appendix 2–Audit Tool

HWSA National Campaign 2007/08 Guarding of Machinery in Manufacturing

A1. Jurisdiction: A2. File No..... A3. ANZSIC code:.....

A4. Inspector Name:..... A5. Date of visit:.....

A6. Registered Name:.....

Trading Name:.....

Registered office address:.....

Site address:.....

ABN:

Workers Compensation Policy No.

A7. (Tick one box for each category)

No. of direct employees: <=20 £ 21 – 100 £ > 100 £
(permanent/temporary/ part-time/full-time)

No. of contractors: <=20 £ 21 – 100 £ > 100 £

No. of labour hire personnel: <=20 £ 21 – 100 £ > 100 £

Representative	Name & Contact Details	Position
Employer		
Employee / Health & Safety Representative		

A8. Nature of work done on this site

Nature of work	Main activities

A9. OTHER INTERVENTION ACTIVITIES

DID THE WORKPLACE RECEIVE THE NATIONAL GUIDANCE ON MACHINERY AND EQUIPMENT SAFETY PRIOR TO THE WORKPLACE VISIT? YES £ NO £

IF YES, HOW DID THEY RECEIVE IT?
(MAIL OUT/INFORMATION SESSIONS/WORKSHOPS/WEBSITE/INDUSTRY ASSOCIATION)

HAVE THEY READ THE GUIDANCE? YES £ NO £

HAVE THEY INTRODUCED ANY CHANGES AS A RESULT OF THE GUIDANCE? YES £ NO £

COMMENTS:

DID THE WORKPLACE ATTEND A SAFETY INTERACTIVE WORKSHOP? YES £ NO £

HAVE THEY INTRODUCED ANY CHANGES AS A RESULT OF ATTENDING THE WORKSHOP? YES £ NO £

COMMENTS:

DID THE WORKPLACE RECEIVE THE SURVEY ON THE GUARDING OF MACHINERY? YES £ NO £

HAVE THEY COMPLETED THE SURVEY? YES £ NO £

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Hazard Identification & Risk Assessment

B1. How effectively does the employer identify machinery hazards?
(Ask employer to describe how & review evidence)

Indicators:

- Task observation
- Analyse incident trends
- Conduct inspections/audits
- Respond to incident reports
- Raise hazards in meetings
- Worker consultation
- Surveys
- Managed (systematic) approach

Please Indicate:

£ 1=Very Poor	£ 2 =Poor	£ 3=Satisfactory	£ 4=Good	£ 5=Very Good
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B2. How adequate are the systems in place to assess identified machinery hazards, that is, conduct risk assessments of machinery at the workplace?

Indicators:

- May use a specific assessment tool that addresses main risk factors
- Documented risk assessments are available for plant/machinery at the workplace
- RA done for new / changed work activities
- RA done after incident / near miss
- Consultation with workers

Please Indicate:

£ 1=Very Poor	£ 2 =Poor	£ 3=Satisfactory	£ 4=Good	£ 5=Very Good
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B3. Inspector Action (Compliance action for ratings of 1 or 2):

Control of Risk

C1. How effective is the system in place at the workplace to select and implement control measures for identified machinery hazards? (Ask employer to describe how & review evidence)

Indicators:

- Managed approach to implementing controls – significant tasks have risk adequately controlled
- Hierarchy of controls applied while identifying and selecting suitable controls
- Relevant standards used and applied
- Controls identified in risk assessments are being implemented
- Implementation tracked eg. via OHS committee
- Incident, injury or complaints history reviewed
- Inspections
- Advice from technical specialists used

Please Indicate:

£ 1=Very Poor	£ 2 =Poor	£ 3=Satisfactory	£ 4=Good	£ 5=Very Good
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C2. How effectively does the organisation monitor and review the effectiveness of control measures? (Ask employer to describe how & review evidence)

Indicators:

- Inspections
- Incident, injury or complaints history reviewed
- Consultation eg. via HSRs, OHS committees

Please Indicate:

£ 1=Very Poor	£ 2 =Poor	£ 3=Satisfactory	£ 4=Good	£ 5=Very Good
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C3. Inspector Action (Compliance action for ratings of 1 or 2):

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Consultation

D1. How effectively does the organisation consult with workers about machinery related hazards and risks? (Ask employer to describe how & review evidence)

Indicators:

- Informal processes/ discussion
- Regular meetings
- OHS Committee

Please Indicate:

£ 1=Very Poor	£ 2 =Poor	£ 3=Satisfactory	£ 4=Good	£ 5=Very Good
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D2. Inspector Action (Compliance action for ratings of 1 or 2):

Training and Instruction

E1. How adequate is the training or instruction provided to employees on safe operating procedures? (Ask employer to describe how & review evidence)

Indicators:

- Training includes risk management process (hazard id, risk factors & applying controls)
- Reporting procedures
- Use of specific controls / equipment
- Done at induction
- Work / task based
- Competency based
- On going

Please Indicate:

£ 1=Very Poor	£ 2 =Poor	£ 3=Satisfactory	£ 4=Good	£ 5=Very Good
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E2. Inspector Action (Compliance action for ratings of 1 or 2):

Supervision

F1. How adequate is the supervision in place to ensure that workers follow/comply with the safe operating procedures? (Ask employer to describe how & review evidence)

Indicators:

- Aware of SOP's
- Designated supervisors
- SOPs / procedures include supervisory requirements
- Supervisors trained
- Feedback occurs
- Disciplinary action may/has occurred

Please indicate:

£ 1=Very Poor	£ 2 =Poor	£ 3=Satisfactory	£ 4=Good	£ 5=Very Good
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F2. Inspector Action (Compliance action for ratings of 1 or 2):

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Plant Maintenance

G1. How effective are the systems in place at the workplace to ensure ongoing maintenance of machines & machine guarding?

Indicators:

- Inspections schedules
- Inspection criteria developed and used
- Paperwork & reporting requirements established
 - JSA
 - Pre-job consultation
 - Contractor management
- Service manual & other information to identify preventative maintenance requirements easily available
- All electrical items associated with the machine - tested and tagged.

Please Indicate:

£ 1=Very Poor	£ 2 =Poor	£ 3=Satisfactory	£ 4=Good	£ 5=Very Good
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G2. Inspector Action (Compliance action for ratings of 1 or 2):

WORKPLACE OBSERVATION

H1. Total number of machines at the workplace	
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Inspect TWO items of fixed-powered Machinery at the workplace.

[Jurisdictions to identify specific high-risk fixed-powered machinery in the target sub-sector].

Consider the risk, paying particular attention to:

- Unwanted activation of switches (hand/foot/other switches)
- In-running nip points?
- Entanglement areas?
- Cutting or shearing points?
- Moving belts, pulleys, chains?
- Rotating or moving parts?
- Stabbing or puncture points?
- Impact or crushing points?
- Material fluid ejection points?
- Risk factors identified through injury or incident reports for this site

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11. Machine 1

Is there an Australian Standard for the machine?

If so, does it comply with the relevant Standard?

12. Type of Guarding			
Stationary or fixed guard	£ Adequate	£ Inadequate	£ N/A
Guard Construction: Substantial £ Compatible £ Ventilated £ Can only be removed using a specifically designed tool £			
Interlocking guard	£ Adequate	£ Inadequate	£ N/A
Is the guard interlocked: Electrically £ Mechanically £ Pneumatically £ Hydraulically £ Machine cannot operate until guard is closed £ Guard cannot be opened when machine is operating £ Opening of guard causes the moving parts to stop £			
Presence sensing devices	£ Adequate	£ Inadequate	£ N/A
Photoelectric Curtain £ Pressure Mat £ Trip Device £ Does the machine de-energise when there is an intrusion into the danger zone £			
Automatic Guards	£ Adequate	£ Inadequate	£ N/A
Is it a slow moving machine? £ Does the guard move into position when the machine is started? £			
Adjustable guards: fixed/self adjusting	£ Adequate	£ Inadequate	£ N/A
Adjustable fixed guard can be easily adjusted to allow only the work piece in the danger zone £ Self adjusting guard cover the hazard fully and move freely without fouling with the moving part £ Can push sticks and jigs or power feeding used to minimise risk of injury £			
Distance guards	£ Adequate	£ Inadequate	£ N/A
Moving part can be considered out of reach if its height \geq 2500mm above the floor or its distance from a barrier is \geq 850mm (refer to Section 3.2 of AS 4024)			
Partial guards	£ Adequate	£ Inadequate	£ N/A
Is it not possible to completely guard the machine? £ What are the other controls in place? Admin control £ PPE £			
Isolation drawings	£ Adequate	£ Inadequate	£ N/A
Details easily accessible: £ Lockout procedures £ Lock off points £ Locks and tags issued £			
Emergency Stop controls (colour, location, restarting, operations, run down times etc)	£ Adequate	£ Inadequate	£ N/A
Safety colours, symbols (warning lights, signs, service pipes, cables conduits colour coded etc)	£ Adequate	£ Inadequate	£ N/A
Administrative Controls	£ Adequate	£ Inadequate	£ N/A
Personal Protective Equipment eg sensor gloves	£ Adequate	£ Inadequate	£ N/A
13. Has the workplace controlled the risk(s) associated with the machine operation? (If not, please provide further information)			
Please Indicate:			
£ 1=Not at all	£ 2=Ineffectively	£ 3=Satisfactorily	£ 4=Effectively
£ 5=Very Effectively			
14. Inspector Action (Compliance action for ratings of 1 or 2):			

Appendix 2–Audit Tool

J1. Machine 2

Is there an Australian Standard for the machine?

If so, does it comply with the relevant Standard?

J2. Type of Guarding			
Stationary or fixed guard	£ Adequate	£ Inadequate	£ N/A
Guard Construction: Substantial £ Compatible £ Ventilated £ Can only be removed using a specifically designed tool £			
Interlocking guard	£ Adequate	£ Inadequate	£ N/A
Is the guard interlocked: Electrically £ Mechanically £ Pneumatically £ Hydraulically £ Machine cannot operate until guard is closed £ Guard cannot be opened when machine is operating £ Opening of guard causes the moving parts to stop £			
Presence sensing devices	£ Adequate	£ Inadequate	£ N/A
Photoelectric Curtain £ Pressure Mat £ Trip Device £ Does the machine de-energise when there is an intrusion into the danger zone £			
Automatic Guards	£ Adequate	£ Inadequate	£ N/A
Is it a slow moving machine? £ Does the guard move into position when the machine is started? £			
Adjustable guards: fixed/self adjusting	£ Adequate	£ Inadequate	£ N/A
Adjustable fixed guard can be easily adjusted to allow only the work piece in the danger zone £ Self adjusting guard cover the hazard fully and move freely without fouling with the moving part £ Can push sticks and jigs or power feeding used to minimise risk of injury £			
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Moving part can be considered out of reach if its height \geq 2500mm above the floor or its distance from a barrier is \geq 850mm (refer to Section 3.2 of AS 4024)			
Partial guards	£ Adequate	£ Inadequate	£ N/A
Is it not possible to completely guard the machine? £ What are the other controls in place? Admin control £ PPE £			
Isolation drawings	£ Adequate	£ Inadequate	£ N/A
Details easily accessible: £ Lockout procedures £ Lock off points £ Locks and tags issued £			
Emergency Stop controls (colour, location, restarting, operations, run down times etc)	£ Adequate	£ Inadequate	£ N/A
Safety colours, symbols (warning lights, signs, service pipes, cables conduits colour coded etc)	£ Adequate	£ Inadequate	£ N/A
Administrative Controls	£ Adequate	£ Inadequate	£ N/A
Personal Protective Equipment eg sensor gloves	£ Adequate	£ Inadequate	£ N/A
J3. Has the workplace controlled the risk(s) associated with the machine operation? (If not, please provide further information)			
Please Indicate:			
£ 1=Not at all	£ 2=Ineffectively	£ 3=Satisfactorily	£ 4=Effectively
£ 5=Very Effectively			
J4. Inspector Action (Compliance action for ratings of 1 or 2):			

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K. Machinery where 'Further Action' was taken			
Type of Machinery	Identified Risk	Compliance Action taken?	Why was the risk not controlled initially?
		<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Cost <input type="radio"/> Design of machinery <input type="radio"/> Lack of risk-management skills <input type="radio"/> Workplace safety culture <input type="radio"/> Lack of training/information <input type="radio"/> Lack of supervision <input type="radio"/> Lack of knowledge of solution <input type="radio"/> Fail safe procedures <input type="radio"/> Other
		<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Cost <input type="radio"/> Design of machinery <input type="radio"/> Lack of risk-management skills <input type="radio"/> Workplace safety culture <input type="radio"/> Lack of training/information <input type="radio"/> Lack of supervision <input type="radio"/> Lack of knowledge of solution <input type="radio"/> Fail safe procedures <input type="radio"/> Other
		<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Cost <input type="radio"/> Design of machinery <input type="radio"/> Lack of risk-management skills <input type="radio"/> Workplace safety culture <input type="radio"/> Lack of training/information <input type="radio"/> Lack of supervision <input type="radio"/> Lack of knowledge of solution <input type="radio"/> Fail safe procedures <input type="radio"/> Other
		<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Cost <input type="radio"/> Design of machinery <input type="radio"/> Lack of risk-management skills <input type="radio"/> Workplace safety culture <input type="radio"/> Lack of training/information <input type="radio"/> Lack of supervision <input type="radio"/> Lack of knowledge of solution <input type="radio"/> Fail safe procedures <input type="radio"/> Other

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Type of Machinery	Identified Risk	Compliance Action taken?	Why was the risk not controlled initially?
		<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Cost <input type="radio"/> Design of machinery <input type="radio"/> Lack of risk-management skills <input type="radio"/> Workplace safety culture <input type="radio"/> Lack of training/information <input type="radio"/> Lack of supervision <input type="radio"/> Lack of knowledge of solution <input type="radio"/> Fail safe procedures <input type="radio"/> Other
		<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Cost <input type="radio"/> Design of machinery <input type="radio"/> Lack of risk-management skills <input type="radio"/> Workplace safety culture <input type="radio"/> Lack of training/information <input type="radio"/> Lack of supervision <input type="radio"/> Lack of knowledge of solution <input type="radio"/> Fail safe procedures <input type="radio"/> Other
		<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Cost <input type="radio"/> Design of machinery <input type="radio"/> Lack of risk-management skills <input type="radio"/> Workplace safety culture <input type="radio"/> Lack of training/information <input type="radio"/> Lack of supervision <input type="radio"/> Lack of knowledge of solution <input type="radio"/> Fail safe procedures <input type="radio"/> Other
		<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Cost <input type="radio"/> Design of machinery <input type="radio"/> Lack of risk-management skills <input type="radio"/> Workplace safety culture <input type="radio"/> Lack of training/information <input type="radio"/> Lack of supervision <input type="radio"/> Lack of knowledge of solution <input type="radio"/> Fail safe procedures <input type="radio"/> Other