



Field Audit Criteria – Roading Contractors

Audit Methodology

Below is a list of criteria that aims to determine whether critical elements of a roading contractor's safety management system have been communicated to operational personnel and that specific legislated controls have been addressed. Where appropriate standards specified in WorkSafe Victoria's "Industry Standard – Safety in Forestry Operations (Harvesting and Haulage)" will be applied. An assessment of the competence of each operator is also undertaken using key criteria from relevant Competency Standards of the relevant Training Package.

Objective observable indicators have been described for each criterion. The scores have been defined so that 0 indicates sub standard performance, 1 indicates that a basic level of compliance with the criteria has been achieved but improvement is possible and 2 indicate a high standard has been achieved. Several criteria have been given greater emphasis and will be weighted by a factor of 4 in the final score.

Evidence will be collected by interviewing field personnel, inspecting records in the field and making observations. As well as a numerical score a description of the evidence observed and any recommended actions will be reported.

The importance or priority of each criterion is nominated. This importance rating should be used to prioritise your program to fix up problems identified in the audit. The following table indicates the time frame for action to be taken for any criteria where a **zero** score was allocated.

Follow up audits will check that you have addressed the identified issues and that action taken is effective.

Importance	Time to address identified deficiencies
Critical	Must be fixed before further work is undertaken
High	Must be corrected within a week
Medium	Must be corrected within a month
Low	Must be corrected before next audit.

Percentages for each individual's performance will be calculated as well as an overall score for the operation. These will be reported along with observations of evidence gathered.

- Where a high standard of performance has been achieved observations will be recorded in green coloured text.
- Where improvement is possible observations and suggestions for improvement will be recorded in blue coloured text.
- Where as basic level of compliance was not observed then the observations and suggestions for improvement will be recorded in red coloured text.



Field Audit Criteria

1. Safety Awareness

To be assessed for every individual on operation.

Criteria	Indicator	Rating	Importance
1.1. Hazard assessment	Are individuals able to demonstrate a recent hazard assessment?	0 = No 1 = Verbal Evidence 2 = Written Evidence	High
1.2. Safe work procedures	Are individuals able to locate written safe work procedures?	0 = No 1 = Verbal Evidence 2 = Written Evidence	High
1.3. Working zone	Are individuals able to describe a working zone for which they are responsible?	0 = No 1 = Verbal Evidence 2 = Written Evidence	High
1.4. Other worker's zones	Is the operator able to describe the working zones of other members of the crew and what they must do if they wish to enter these zones?	0 = No 1 = Verbal Evidence 2 = Written Evidence	High
1.4. Unsafe plant isolation procedure	Are individuals able to describe a robust isolation procedure?	0 = No 1 = Verbal Evidence 2 = Written Evidence	Medium
1.5. Working Alone Procedures	Are individuals able to describe working alone procedures?	0 = No 1 = Verbal Evidence 2 = Written Evidence	Medium
1.6. Emergency procedures - Medical	Are individuals able to describe emergency response procedures to a medical emergency, including evacuation?	0 = No 1 = Verbal Evidence 2 = Written Evidence	Medium
1.7. Emergency procedures – Fire	Are individuals able to describe emergency response procedures to a fire starting on the coupe?	0 = No 1 = Verbal Evidence 2 = Written Evidence	Medium
1.8. Emergency procedures – Spill	Are individuals able to describe emergency response procedures to a spill?	0 = No 1 = Verbal Evidence 2 = Written Evidence	Medium
1.9. Emergency procedures - Protest	Are individuals able to describe emergency response procedures to a coupe invasion by protestors?	0 = No 1 = Verbal Evidence 2 = Written Evidence	Medium
1.10. Injury reporting procedures	Are individuals able to describe injury reporting procedure?	0 = No 1 = Verbal Evidence 2 = Written Evidence	Medium
1.11. Issue resolution	Are individuals able to describe issue resolution procedures both for internal issues and issues involving VicForest personnel?	0 = No 1 = Verbal Evidence 2 = Written Evidence	Medium
1.12. Disciplinary procedures	Are individuals able to describe disciplinary sanctions for unsafe work?	0 = No 1 = Verbal Evidence 2 = Written Evidence	Medium



Field Audit Criteria

2. Operator Personal Protective Equipment

To be assessed for every individual on operation.

Criteria	Indicator	Rating	Importance
2.1. Safety Helmet	Is operator wearing a safety helmet compliant with AS/NZS 1801? (stickers on outer shell can be deemed acceptable)	0 = No 1 = Not compliant with AS 2 = Compliant with AS	Critical
2.2. High visibility clothing	Is operator wearing high visibility clothing compliant with AS/NZS 4602?	0 = No 1 = Not compliant with AS 2 = Compliant with AS	Critical
2.3. Cut resistant leg protection	Are all chainsaw users using cut resistant leg protection compliant with AS/NZS 4453?	0 = No 1 = Not compliant with AS 2 = Compliant with AS	Critical
2.4. Hearing Protection	Are all operators exposed to hazardous noise wearing hearing protection compliant with AS/NZS 1270?	0 = No 1 = Not compliant with AS 2 = Compliant with AS	Critical
2.5. Safety footwear	Are operators wearing safety footwear compliant with AS/NZS 2210? The soles should be suitable for task eg spiked boots for fallers and rubber soles for plant operators.	0 = No 1 = Not compliant with AS 2 = Compliant with AS	Critical
2.6. Gloves – not applicable for hand fallers	Are gloves compliant with AS/NZS 2161 available to be used to protect against hazardous substances, wire sprags or other hazards?	0 = No 1 = Not compliant with AS 2 = Compliant with AS	Medium
2.7. Eye Protection – not applicable to machine operators or trucks	Is eye protection compliant with AS/NZS 1336 worn where necessary?	0 = No 1 = Not compliant with AS 2 = Compliant with AS	High



Field Audit Criteria

3. Competence and Equipment Condition

Specific field based assessments for each task

3.1. Hand Falling

Criteria	Indicator	Rating	Importance
3.1.1.Tree assessment	Does tree assessment ensure wind appropriate, lean not excessive, open area to fall into, no widow makers?	0 = No 1 = Most of the time 2 = All of the time	Critical
3.1.2.Escape route	Is appropriate escape route selected, cleared and used?	0 = No 1 = Most of the time 2 = All of the time	Critical
3.1.3.Falling technique	Is correct falling technique used?	0 = 0-25% 1 = 25-50% 2 = 50-75% 3 = 75 – 95% 4 = Greater than 95%	Critical
3.1.4.Stump check	Do recent stumps indicate that safe falling techniques have been used?	0 = 0-25% 1 = 25-50% 2 = 50-75% 3 = 75 – 95% 4 = Greater than 95%	Critical
3.1.5.Chainsaw condition	Is chainsaw maintained in compliance with AS/NZS 2726?	0 = No 1 = Most of the features 2 = All of the features	High
3.1.6.Additional gear	Does faller have belt, wedges, axe and correct fuel container?	0 = No 1 = Most of the features 2 = All of the features	High
3.1.7. Communication with skidder /dozer operator	Is faller aware of location of all people on the coupe?	0 = Not compliant 1 = Eye contact etc 2 = Electronic system in serviceable condition	High
3.18. Pre-operational checklist	Has documented weekly check of safety features been completed?	0 = More than 5 days ago 1 = Not consistently or less frequently than weekly 2 = Weekly and consistently	Medium



Field Audit Criteria

3.2. Machine Operation – Dozer, excavator, grader, other.

Criteria	Indicator	Rating	Importance
3.2.1 Follows safe work procedures	Are safe work procedures followed while changing attachments, mount/dismount, working near ground workers?	0 = No 1 = Most of the issues 2 = All of the issues	Critical
3.2.2. Safe Working Condition	Is machine in safe working condition, including brakes, emergency exit, steps and grab rails?	0 = No 1 = Most of the features 2 = All of the features	Critical
3.2.3. Machine Guarding	Are all necessary guards in place and in a serviceable condition?	0 = No 1 = Most of the features 2 = All of the features	High
3.2.4. Falling Object Protection	Is there a Falling Object Protection Structure compliant with ISO 8083 or AS 2294.3 in a serviceable condition?	0 = No 1 = Minor Damage 2 = Present and compliant with standard	Critical <i>Weighted (x4)</i>
3.2.5. Roll Over Protection	Is there a Roll Over Protection Structure compliant with ISO 8082 or AS 2294.2 in a serviceable condition?	0 = No 1 = Minor Damage 2 = Present and compliant with standard	Critical <i>Weighted (x4)</i>
3.2.6. Operator Protective Guards	Is there Operator Protective Guarding compliant with AS 4988, ISO 8084 or AS 2294.1 Supp 1?	0 = No 1 = Minor Damage 2 = Present and compliant with standard	Critical <i>Weighted (x4)</i>
3.2.7. Windows	Are all windows in a serviceable condition?	0 = Window missing 1 = Present and damaged 2 = Serviceable Condition	Low
3.2.8. Seat Belts	Are seatbelts fitted and worn where there is a risk of rollover?	0 = Not fitted 1 = Fitted but not worn 2 = Fitted and worn	Medium
3.2.9. Chainsaw Technique	Is a safe chainsaw technique used?	0 = No 1 = Most of the time 2 = All of the time	Critical
3.2.10. Chainsaw condition	Is chainsaw maintained in compliance with AS/NZS 2726?	0 = No 1 = Most of the features 2 = All of the features	High
3.2.11. Additional gear	Does chainsaw operator have wedges, axe and correct fuel container?	0 = No 1 = Most of the features 2 = All of the features	High
3.2.12. Safety information	Is appropriate safety information available? -decals -operators manual	0 = No 1 = Most of the features 2 = All of the features	High
3.2.13. Communication with others	Electronic communication is available and used.	0 = None 1 = Eye contact 2 = Electronic system used	High
3.2.14. Shut down safety.	Are implements grounded when machine is stationery?	0 = No 1 = Most of the time 2 = All of the time	High
3.2.15. Pre-operational checklist	Has documented check of machines safety features been completed?	0 = More than 5 days ago 1 = Not consistently or less than 5 days ago 2 = Less than a day ago	Medium



Field Audit Criteria

3.3. *Offsiders*

Criteria	Indicator	Rating	Importance
3.3.1. Follows safe work procedures	Are safe work procedures followed?	0 = No 1 = Most of the issues 2 = All of the issues	High
3.3.2. Communication with others	Is electronic communication available and used?	0 = Not compliant 1 = Electronic system in serviceable condition	High



Field Audit Criteria

3.4. Tip Truck Driver

Criteria	Indicator	Rating	Importance
3.4.1. Follows safe work procedures	Are safe work procedures followed - safe load - 3 point mount/dismount - work zones?	0 = No 1 = Most of the issues 2 = All of the issues	Critical
3.4.2. Safe Working Condition	Is truck in safe working condition?	0 = No 1 = Most of the features 2 = All of the features	High
3.4.3. First Aid Equipment	Is first aid kit adequate?	0 = No 1 = Most of the features 2 = All of the features	High
3.4.4. Hazard Triangles	Are hazard triangles available?	0 = No 1 = Most of the features 2 = All of the features	High
3.4.5. Fire Fighting Equipment	Is fire equipment adequate?	0 = No 1 = Most of the features 2 = All of the features	High
3.4.6. Safety information	Is appropriate safety information available? -decals -operators manual	0 = No 1 = Most of the features 2 = All of the features	High
3.4.7. Communication with others	Is electronic communication available and used?	0 = None 1 = Eye contact 2 = Electronic system used	High
3.4.8. Safe load	Is the load within the confines of the body?	0 = No 1 = Most of the time 2 = All of the time	High
3.4.9. Driving Hours	Record of hours up to date and within legal hours?	0 = More than 5 days ago 1 = Not consistently or less than 5 days ago 2 = Less than a day ago	High
3.4.10. Pre-operational checklist	Has documented check of machines safety features been completed?	0 = More than 5 days ago 1 = Not consistently or less frequently than weekly 2 = Weekly and consistently	Medium
3.4.11. System Documentation (for owner operators)	Does driver have access to the following? - Safe Work Procedures - Induction Manual - MSDS's	0 = No 1 = Most of the issues 2 = All of the issues	Medium



Field Audit Criteria

4. Combined Hazard Assessment

To be assessed for the operation as a whole.

Criteria	Indicator	Rating	Importance
4.1. Work Area Hazard Checklist	Are all visible hazards documented in area(s) current work area?	0 = No 1 = Most hazards recorded 2 = All hazards recorded	Critical
4.2. Hazards communicated	Are authorised personnel and visitors warned of hazards and informed of work areas?	0 = Not authorised personnel 1 = All authorised personnel and most visitors 2 = Everyone	High
4.3. Responsibility for action (signed off)	Have controls been documented and signed off?	0 = No 1 = Most controls 2 = All controls	Medium
4.4. Car Park	Are cars parked so they are not at risk by the operations, eg proximity to operations, hazardous trees?	0 = No 1 = Most of the time 2 = All of the time	Medium
4.5. Machinery Servicing area	Is there a designated safe designated servicing area, no overhanging limbs or tripping hazards?	0 = No 1 = Most of the time 2 = All of the time	Medium
4.6. Close proximity control plan	Do all the tasks where working in close proximity have a documented control plan?	0 = No 1 = Most of the tasks 2 = All of the tasks	High
4.7. Road Management Plan	Is the agreed Road Management Plan being implemented? (If no plan then an observation should be made to VicForests about this)	0 = No 1 = Most of the issues 2 = All of the issues	High
4.9. Construction Safe Method Statement (Safe Work Procedure)	Does all high risk construction work have a safe work method statement? N:B: High risk construction work includes but is not limited to road making where there is any movement of powered mobile plant.	0 = No 1 = Most Work 2 = All work	High



Field Audit Criteria

5. Site Safety Gear

To be assessed on operation overall

Criteria	Indicator	Rating	Importance
5.1. Worksite Entry Signs	Is adequate warning evident for personnel entering coupe -UHF channel - traffic control - tree falling sign - PPE?	0 = No 1 = Most of the signs 2 = All signs at all entrances	High
5.3. First aid equipment	Are all personnel able to rapidly access a well maintained, first aid equipment adequate to deal with a major laceration?	0 = No 1 = Most of the time 2 = All of the time	High
5.4. Emergency communication equipment	Does crew have the ability to call emergency services and direct them to coupe: - phone / radio - emergency plan incl. map?	0 = No 1 = Most of the time 2 = All of the time	High
5.5. Fire fighting Equipment	Is fire fighting equipment serviceable? - Extinguishers available charged and checked. - Gear prescribed by Utilisation Procedures will be checked during periods set by Utilisation Procedures	0 =No 1 = Most of the time 2 = All of the time	High
5.6. Water	Is adequate clean water available for the crew for drinking and washing?	0 =No 1 = Most of the time 2 = All of the time	High
5.8. If you are injured poster	Is an "If you are Injured" poster available to crew?	0 =No 1 = Available 2 = All aware of location	High
5.9. MSDS	Are MSDS's available for hazardous substances?	0 = less than 75% of substances 1 = More than 75% of substances 2 = All substances	Medium
5.10 System documentation	Is all system documentation current and well maintained? - Induction Manual - Safe Work Procedures	0 =No 1 = Manuals available 2 = Current version	High



Field Audit Criteria

5. Stump Check Methodology

In order to assess whether a Hand Faller is working consistently in accordance with the falling technique recommended by AS 2727 stumps will be assessed for defects. Defects that are considered significant may include:

- Undercutting the scarf.
- Overcutting the scarf.
- Backcut or scarf cuts not horizontal.
- Back Cut not high enough above scarf.
- Insufficient hinge-wood retained.

Each of these defects can lead to loss of control of the direction of fall. Undercutting and overcutting of scarfs can lead to slabbing up of free splitting timber.

For each faller a percentage compliance is calculated as follows.

$$\frac{(\text{No of Stumps} - \text{No Stumps with a Defect})}{\text{No of Stumps}} \times \frac{100}{1}$$

During Full Day Audits the following numbers of stumps will be assessed where practical:

- 35 previous stumps
- 15 fresh stumps (fallen during the audit)

During Half Day Audits the following numbers of stumps will be assessed where practical:

- 15 previous stumps
- 5 fresh stumps (fallen during the audit)

All stumps that are assessed will be marked with crayon and the defects will be marked on the stump.

An appendix will be added to the field report indicated the number of the stump the defects identified and the diameter of the stump.



Field Audit Criteria

Version Information

Original version was developed for audits in the 2008 and 2009. The criteria were developed following a meeting convened by David Potter of VicForests and attended by relevant contractors at Noojee on 19th September 2008.