

<p align="center">U.S. Department of Agriculture Forest Service</p>	<p>1. WORK PROJECT/ACTIVITY</p> <p align="center">General Crosscut Saw Use</p>	<p>2. LOCATION</p>	<p>3. UNIT</p> <p align="center">R-5</p>
<p>JOB HAZARD ANALYSIS (JHA) References-FSH 6709.11 and 12 (Instructions on Reverse)</p>	<p>4. NAME OF ANALYST</p> <p align="center">R-5 Chainsaw & Crosscut Working Group</p>	<p>5. JOB TITLE</p> <p align="center">Crosscut Saw Use</p>	<p>6. DATE PREPARED</p> <p align="center">02/16/2007</p>
<p>7. TASKS/PROCEDURES</p>	<p>8. HAZARDS</p>	<p>9. ABATEMENT ACTIONS Engineering Controls * Substitution * Administrative Controls * PPE</p>	
<p>*Note</p> <p align="center">Training Requirements</p> <p align="center">Certification and Instructor Limits</p> <p align="center">Personal Protective Equipment</p>	<p align="center">Cuts, Eye Injuries,</p>	<ul style="list-style-type: none"> • <i>Unless specifically stated this hazard analysis applies to the crosscut sawyer.</i> • Successful completion of the MDTC Cross cut saw course. • Certified in basic first-aid and CPR or an individual who is qualified in basic first-aid and CPR is available in project area and is not operating a saw. • An uncertified crosscut cut saw helper needs to have specific on-site instruction in tool handling and safety prior to assisting sawyer. • Crosscut operators shall be properly certified prior to operation and will adhere to any restrictions or limitations placed upon them. • Crosscut operators may only exceed the restrictions or limitations placed on them if they are under the supervision of a qualified individual who is certified at a higher level of saw operation. • For the purposes of training, additional individuals besides the saw operator may be allowed with-in a 2 ½ times tree height radius if under supervision of a qualified instructor. • Appropriate gloves (cut resistant for sharpening), hardhat, long sleeve shirt, chaps(recommended to overlap top of boots 2”), Boots-8” high with skid resistant soles. and eye protection. • Proper PPE must be worn at all times. • An ax and adequate wedges are deemed safety equipment that must be available for all sawing operations. 	

Crosscut saw: General

Crosscut - Transporting

Communications

Escape routes

Weather / Darkness

Cuts

Injury or cuts

Injury or cuts

Injury or cuts

- Crosscut saws have only one operator who is entirely responsible for sawing even when a helper or second sawyer is used.
- Must have a proper covering sheath for all the cutting teeth.
- Must be sheathed when not in use.
- Must have good working handles.
- Saws must be sharp and in serviceable condition.
- Ensure saw is sheathed when transporting.
- Handles should be removed if moving through thick vegetation to prevent snagging.
- If transporting by packstock:
 - Bend in a horseshoe shape with teeth pointed backwards.
 - Secured saw to the middle of the pack saddle.
 - Saw should be on lead animal.
- Must have established means of communication, ie. yelling, radio, hand signals, etc.
- Communications must be clear, concise and understood by everyone involved.
- All bucking, limbing and felling operations require clean escape routes with a minimum 20 foot path before starting to cut.
- Choose an escape path that extends diagonally away from the expected felling line and always have an alternate retreat path to a safety zone.
- Where two fallers are operating a crosscut saw each must have separate escape routes if exiting the stump at the same time.
- Do not saw during high winds, electrical storms or other hazardous weather.
- Do not conduct felling operations if the tops or the 2 1/2 tree length safety circle is obscured by darkness, smoke, fog or any other condition.

Size-up

Injury, cuts or
Death

- Size up the tree considering the tree species, height, diameter, lean, soundness, current and previous fire damage, split or broken top, widow makers, and other hazard tree indicators.
- Bore tree if necessary to determine soundness.
- Walk anticipated lay of tree and check for hazards.
- Clear work area of hazards and obstructions.
- Determine and clear primary and secondary escape routes.
- Ensure that area 2 1/2 times the height of the tree to be felled is clear of personnel.
- Be alert for environmental conditions that could increase risk. (strong/gusty winds, steep slopes, etc.)
- Ensure adequate traffic control measures are taken on roads and trails.
- If the identified tree cannot be safely removed and presents a hazard, the area will be flagged off at a safe distance and an alternate mitigation used.

Felling Process

Head Injury, Eye
Injury, Cuts,
Amputation,
Crushing Injuries,
and Death

- Only those crosscuts operators that have been certified at the appropriate level with conduct crosscut felling operations.
- **No employee shall approach a faller closer than 2-1/2 tree lengths of trees being felled until the faller has acknowledged that it is safe to do so, unless it is demonstrated that a team of employees is necessary to manually fell a particular tree.**
- Follow proper felling procedure as outlined in MTDC crosscut course
- Initiate undercut at a level that ensures adequate footing and balance throughout cutting sequence.
- Prior to starting the back cut, survey the area to ensure that nobody has entered the area. A warning should be sounded as to the intentions of your actions. (i.e. “tree coming down, sidehill”)
- At the first sign of the tree committing to the undercut proceed to safety zone.
- **No felling operations will be conducted at night or during times the top of tree being felled is obscured.**

Bucking / Limbing

Injury or cuts

- Anticipate log tensions and compressions.
- Watch for and carefully relieve tension on saplings and limbs (springpoles) with a series of small cuts to compression side.
- Use wedges.
- Use caution when cutting limbs supporting logs off the ground.
- Avoid finishing cuts from downhill side.
- Sound warning for all objects moving downhill.
- Do not buck logs on steep slopes with people below.
- Ensure escape route.

10. LINE OFFICER SIGNATURE

11. TITLE

12. DATE

Previous edition is obsolete

(over)

JHA Instructions (References-FSH 6709.11 and .12)

The JHA shall identify the location of the work project or activity, the name of employee(s) involved in the process, the date(s) of acknowledgment, and the name of the appropriate line officer approving the JHA. The line officer acknowledges that employees have read and understand the contents, have received the required training, and are qualified to perform the work project or activity.

Blocks 1, 2, 3, 4, 5, and 6: Self-explanatory.

Block 7: Identify all tasks and procedures associated with the work project or activity that have potential to cause injury or illness to personnel and damage to property or material. Include emergency evacuation procedures (EEP).

Block 8: Identify all known or suspect hazards associated with each respective task/procedure listed in block 7. For example:

- a. Research past accidents/incidents.
- b. Research the Health and Safety Code, FSH 6709.11 or other appropriate literature.
- c. Discuss the work project/activity with participants.
- d. Observe the work project/activity.
- e. A combination of the above.

Block 9: Identify appropriate actions to reduce or eliminate the hazards identified in block 8. Abatement measures listed below are in the order of the preferred abatement method:

- a. Engineering Controls (the most desirable method of abatement). For example, ergonomically designed tools, equipment, and furniture.
- b. Substitution. For example, switching to high flash point, non-toxic solvents.
- c. Administrative Controls. For example, limiting exposure by reducing the work schedule; establishing appropriate procedures and practices.
- d. PPE (least desirable method of abatement). For example, using hearing protection when working with or close to portable machines (chain saws, rock drills, and portable water pumps).
- e. A combination of the above.

Block 10: The JHA must be reviewed and approved by a line officer. Attach a copy of the JHA as justification for purchase orders when procuring PPE.

Blocks 11 and 12: Self-explanatory.

Emergency Evacuation Instructions (Reference FSH 6709.11)

Work supervisors and crew members are responsible for developing and discussing field emergency evacuation procedures (EEP) and alternatives in the event a person(s) becomes seriously ill or injured at the worksite.

Be prepared to provide the following information:

- a. Nature of the accident or injury (avoid using victim's name).
- b. Type of assistance needed, if any (ground, air, or water evacuation).
- c. Location of accident or injury, best access route into the worksite (road name/number), identifiable ground/air landmarks.
- d. Radio frequencies.
- e. Contact person.
- f. Local hazards to ground vehicles or aviation.
- g. Weather conditions (wind speed & direction, visibility, temperature).
- h. Topography.
- i. Number of individuals to be transported.
- j. Estimated weight of individuals for air/water evacuation.

The items listed above serve only as guidelines for the development of emergency evacuation procedures.

JHA and Emergency Evacuation Procedures Acknowledgment

We, the undersigned work leader and crew members, acknowledge participation in the development of this JHA (as applicable) and accompanying emergency evacuation procedures. We have thoroughly discussed and understand the provisions of each of these documents:

SIGNATURE DATE

SIGNATURE DATE
