<table>
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<th>7. TASKS/PROCEDURES</th>
<th>8. HAZARDS</th>
<th>9. ABATEMENT ACTIONS</th>
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<tr>
<td>Personal Protective Equipment (PPE)</td>
<td>Cuts to body, injuries from falls and aerial hazards. Eye injuries, Cuts and abrasions, aerial hazards and cuts from saws and axes</td>
<td><strong>Wear PPE.</strong> The following PPE is required for saw operations: Forest Service approved hardhat; eye protection, appropriate gloves (cut-resistant); long sleeve shirt (optional), long pants; Forest Service approved chain saw chaps (optional); approved first aid kit; heavy duty, cut resistant, waterproof or water repellent 8” high boots with nonskid soles; fire shelter (wildfire and prescribed burn assignments)</td>
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<td>Saw qualifications</td>
<td>Accidents from improper or non qualified personnel using saws</td>
<td>Must attend classroom and field training encompassing in part or in total a national training program such as Wildfire Power Saws S-212 or MTDC. Sawyers must maintain national certifications indicating their proficiency levels at the A, B or C sawyer level for crosscut saws (Refer FSM 2300 Section 2358.1). Recommended that new sawyers visit OSHA web site “Logging Advisor” prior to taking saw training: <a href="http://www.osha-slc.gov/SLTC/logging_advisor/manual">www.osha-slc.gov/SLTC/logging_advisor/manual</a></td>
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<td>Sharpening Crosscut: Axe:</td>
<td>Cuts to hands, body or legs</td>
<td>Use saw vise. Wear gloves and eye protection. Cover saw with guard when saw is in use but not being sharpened. Keep sharpening tools in good condition. Always use gloves and file guards. Wear eye protection. Use a vise if available.</td>
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<td>Transporting Saws: - vehicles - aircraft - ATV - watercraft - pack animals</td>
<td>Damage to saw or injury to personnel</td>
<td>When transporting in a vehicle, make sure saw is properly secured to prevent getting hit by falling equipment or over turned items. Never travel with crosscut saw in an enclosed vehicle. Secure crosscuts to something large to prevent falling through nets during aerial transport. When transporting crosscut on a pack animal, take extra care. DO NOT use nylon cord to secure saw to pack animals. Adequately guard and secure saw.</td>
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<td>Carrying crosscut saws</td>
<td>Damage to saw or injury to personnel</td>
<td>When carrying a saw on your shoulder, take care due to sharpness of saw. Wear, gloves. Sheath crosscut saw and make sure proper spacing observed when carrying; saws should be last in line. Remove rear handle when carrying on shoulder. Cutting teeth should face away from neck and face.</td>
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<td>Operations and use: Felling:</td>
<td>Personal injury or property damage due to improper operations, 1) No night felling, or when the distance 2-1/2 times the height of tree (360°) to be felled is obscured by darkness, fog, smoke or other condition.</td>
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2) Do proper situational awareness and size up.
3) Insure to establish and clear primary and secondary escape routes, safety zones and alternates.
4) Control cutting area, utilize trail/road guards as needed.
5) Saw from safe standing height
6) Consider mental and physical condition of you and crew members
7) Must be carded for felling.

| Bucking: | Personal Injury or property damage due to improper operation, safety procedures and human factors | Follow proper limbing, bucking and felling procedures and techniques. Watch for spring poles. Undercut all trees exceeding 5” DBH. Do proper size up. Never saw alone. Observe kerf and determine binds. Wedge all trees when possible/practical. Always buck trees from uphill side. When limbing, watch for limbs under pressure. Use warning shouts when felling and maintain proper spacing. Watch for bucked and felled material rolling downhill. When bucking blowdown, make sure to observe binds and use extra caution due to logs under pressure that could move in any direction when overhead weight is cut or removed. Maintain good communication with partners when operating crosscuts; be sure who will remove saw when felling. Have workers and felling crews working on the same contour, rather than some working above others on steep hillsides. Space employees so activities of one will not create a hazard for another.
  
When chopping down into the top of a log keep the handle parallel to the ground. This will always keep the cutting edge of the axe a full handle length from the lower extremities.

| AXE USE | safety procedures and human factors |
| Hazards: | Personal injury or damage to property | Make sure to walk out lay. Watch for structure, trails, roads and other recreation areas/activities. Post lookouts as appropriate to warn forest users and stop traffic. Watch for powerlines and any other improvement that could cause injury or be damaged. Watch for nails and fence in trees. When felling or bucking at campsites, check for metal objects in trees before cutting.

Environmental:

- 1) Weather

- 2) Animals and insects

- 3) Plants

| Personal injury or illness | Observe winds and stop operations when deemed unsafe due to speed and gust. Never work or continue to work when electrical storms or other weather hazards are in proximity to work area and deemed unsafe to continue operations. In wet weather saw/ax operations should be terminated. Be aware of temperatures to help prevent dehydration and hypothermia. Drink plenty of water as needed and wear appropriate clothing for conditions (Refer to FSH 6709.1; Chapter 50 Section 54).

Bites and disease | Animals: Watch for snakes in area and avoid those areas that have large concentrations of rattlesnakes or dens.

Insects: Check for ticks, spiders, scorpions and any other insects that pose a safety issue. Do periodic check of clothing and work areas, and check clothing and body after work. Avoid putting work clothing in living areas to prevent transporting insects to living quarters. Avoid wearing bright colors for ticks and bees. Never work near bee or wasp nests, and (when discovered) mark with flagging and avoid working in those areas. When personnel are stung, have the person rest for a half an hour. If multiple stings, and especially above shoulders, observe and transport person to station or hospital as situations dictate. Watch for insects in storage areas and use gloves when necessary to move rocks and logs.

Watch for and try to avoid cutting in poison ivy, poison oak and poison sumac. Ask local personnel what plants exist in area. When exposed to sap, wash with soap and water or ivy wash. Use ivy block when working in areas infested with plants. Wash hands after cleaning equipment to limit exposure. Watch for nettles, briars and any other plants that pose a safety issue. (Refer to FSH 6709.1; Chapter 50 Section 53).
INDIVIDUAL SAW OPERATORS ALWAYS HAVE THE OPPORTUNITY TO SAY “NO” AND WALK AWAY FROM ANY SITUATION THEY DETERMINE TO BE AN UNACCEPTABLE HIGH RISK**

Attend required saw refreshers to include but not limited to:
1) Review regional saw policy
2) Review saw JHA
3) Discuss accidents of past year in Region or areas of concern
4) Update on policy, training, and equipment changes
5) Recertify sawyers as needed
6) Ensure first aid, CPR and bloodborne pathogen trainings are current and up to date (Refer to FSH 6709.1; Chapter 50 Section 52).

Make sure tailgate safety sessions are completed and documented prior to starting a new job or as necessary. Make sure to have evacuation plans for work areas. Contact Supervisors, Safety Officer, or Forest Saw Coordinator when issues or questions develop.

/s/ Mike Brod
Acting Forest Supervisor
1/30/2020
**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) writing the JHA, the date(s) of development, and the name of the appropriate line officer approving it. The supervisor 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 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.

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**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 frequency(s).
- e. Contact person.
- f. Local hazards to ground vehicles or aviation.
- g. Weather conditions (wind speed & direction, visibility, temp).
- h. Topography.
- i. Number of person(s) to be transported
- j. Estimated weight of passengers 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:

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