

**ROCKY MOUNTAIN NATIONAL PARK
JOB HAZARD ANALYSIS (JHA)**

1. WORK PROJECT OR ACTIVITY: Axe/Hatchet Use		2. DATE:	<input checked="" type="checkbox"/> NEW <input type="checkbox"/> REVISED
3. LOCATION OF JOB:	4. DIVISION:	5. BRANCH:	
6. NAME OF EMPLOYEE(S) INVOLVED IN ANALYSIS: Jana Chalk	7. SUPERVISOR:	8. DIVISION CHIEF:	
9. REQUIRED PERSONAL PROTECTIVE EQUIPMENT:		Eye protection, Heavy-duty cut-resistant or leather boots with no-skid soles, Heavy-duty cut-resistant or leather gloves, Long-sleeved shirt, Chaps are highly recommended	
10. REQUIRED TOOLS AND EQUIPMENT:		Axe or Hatchet	

13. SEQUENCE OF JOB STEPS	14. POTENTIAL HAZARD	15. HAZARD CONTROL
Tool Inspection	Struck by Cut by	<ul style="list-style-type: none"> • Make sure the handle is clean and free of cracks or splits and the head is securely fastened to the handle. • Make sure the bit is sharp and free of burrs. • Sheath in place to protect the blade.
Prepare Site	Struck by Cut by Slips, Trips & Falls	<ul style="list-style-type: none"> • Clear work area a radius of one arm length plus 3 axe/hatchet lengths of obstacles that could deflect the blade such as bushes or overhanging branches. • Clear the work area of bark, limbs, or other items that could affect footing.
Axe Use	Cut by Struck by	<ul style="list-style-type: none"> • Wear required PPE. Use chaps for added protection. • Notify other workers in work area before swinging. Maintain safe distance from other workers. Anticipate wood chips flying long distances (> 20') when using an axe. • Always swing away from your body and toward the cut. • Be sure the swing follow through is not in line with legs or feet. • If the tree or log to be chopped is not large enough to resist movement during chopping, secure it to another log, rock, or by other means. • Position feet firmly with weight distributed evenly. Maintain a firm grip on the handle with both hands. • Start notch wide enough so as you work into the thickness of the log, the angle of cut and chopping is not too steep. Making alternate left and right cuts to create a "V". • If the tree or log is above the ground, beware, it may give way unexpectedly when the holding wood releases. • Stop axe use if you become fatigued.

13. SEQUENCE OF JOB STEPS	14. POTENTIAL HAZARD	15. HAZARD CONTROL
Hatchet Use	Cut by Struck by	<ul style="list-style-type: none"> • Wear required PPE • Notify other workers in work area before swinging. Maintain safe distance from other workers. • Always swing away from your body and toward the cut. • Be sure the swing follow through is not in line with legs or feet. • Never chop on the ground, always use a chopping block. • Place the wood to be chopped on top of and perpendicular to the chopping block. • Crouch or kneel on one knee behind the chopping block • Hold upper end of the wood to be chopped with one hand. With the other hand firmly grip the hatchet handle. • Chop the wood where it is supported by the chopping block. • Chop at 45-degree angles to the length of the wood making alternate left and right cuts to create a “V”. • Stop hatchet use if you become fatigued.
Limbing	Cut by Struck by	<ul style="list-style-type: none"> • Stand with the tree trunk between you and the limb being cut.
Splitting Wood	Cut by Struck by	<ul style="list-style-type: none"> • Never chop on the ground, always use a splitting block. • Keep the striking angle of the axe head of the blade perpendicular to the wood, to prevent glancing blows. • If splitting small pieces of wood (for kindling, etc.), lightly start the hatchet blade into the piece of wood, remove holding hand from the wood, and swing the hatchet and wood piece into the splitting block.
Storage at Work Site	Cut By Trips & Falls	<ul style="list-style-type: none"> • When not in use, protect the blade with a sheath and place it in plain view a safe distance from the work area.
Transporting the Axe/Hatchet	Cut by	<ul style="list-style-type: none"> • Protect the blade with a sheath. • When carrying, grasp the handle directly behind the head and carry it with the blade pointing down and away from the body. • If traveling on a slope, carry axe/hatchet in your downhill hand. • Never carry with the axe/hatchet blade on your shoulder. • If transporting on a pack, place the blade down and facing back in case of a trip or fall.

Emergency Evacuation Instructions

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

Be prepared to provide the following information:

- a. Nature of the accident or injury (avoid using the victim's name).
- b. Type of assistance needed, if any (ground, air, or water).
- 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 and 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 Acknowledgement

We, the undersigned Supervisor and employees, acknowledge participation in the development of this JHA and accompanying emergency evacuation procedures. We have thoroughly discussed and understand the provisions of each of these documents.

SUPERVISOR'S SIGNATURE		DATE:
EMPLOYEE SIGNATURE	EMPLOYEE SIGNATURE	
EMPLOYEE SIGNATURE	EMPLOYEE SIGNATURE	
EMPLOYEE SIGNATURE	EMPLOYEE SIGNATURE	
EMPLOYEE SIGNATURE	EMPLOYEE SIGNATURE	
EMPLOYEE SIGNATURE	EMPLOYEE SIGNATURE	
EMPLOYEE SIGNATURE	EMPLOYEE SIGNATURE	
DIVISION CHIEF'S SIGNATURE		DATE:

JHA Instructions

The JHA shall identify the date(s) the JHA was written, the location of the work project or activity, the Division and Branch writing the JHA, the name of the employee(s) writing the JHA, the name of the employee(s)'s supervisor approving the JHA, and the name of the Division Chief approving the JHA. 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: Self explanatory

Block 6: Name of employee(s) writing the JHA

Block 7: Name of employee(s)'s supervisor approving the JHA

Block 8: Name of the Division Chief approving the JHA

Block 9: List all required Personal Protective Equipment (PPE) identified in Hazard Control section of the JHA.

Block 10: List all the tools and equipment required to perform the work project or activity.

Block 11: List all applicable standards associated with the completion of the work project or activity. (Example: OSHA 1910.134 Respiratory Protection)

Block 12: List specific employee training required to perform the work project or activity.

Block 13: 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 14: Identify all known or suspect hazards associated with each respective task/procedure listed in block 13. For example:

- a. Research past accidents/incidents
- b. Research appropriate literature
- c. Discuss the work project/activity with participants
- d. Observe the work project/activity
- e. A combination of the above

Block 15: Identify appropriate actions to reduce or eliminate the hazards identified in block 14. Abatement measures listed below are the order of the preferred abatement method:

- a. Engineering Controls: The most desirable method of abatement. Examples: Ergonomically designed tools, equipment, and furniture
- b. Substitution: Example: Switching to high flash point, non-toxic solvents
- c. Administrative Controls: Example: Limiting exposure by reducing the work schedule
- d. Personal Protective Equipment (PPE): The least desirable method of abatement. Example: Hearing protection when working with or close to portable machines (chainsaws, rock drills, and portable water pumps)
- e. A combination of above