

U.S. Department of Agriculture Forest Service JOB HAZARD ANALYSIS (JHA) References-FSH 6709.11 and -12 (Instructions on Reverse)		1. WORK PROJECT/ACTIVITY Hand Tool Maintenance	2. LOCATION George Washington and Jefferson National Forests	3. UNIT All Units of the George Washington and Jefferson National Forests
JOB HAZARD ANALYSIS (JHA)		4. NAME(S) OF ANALYST(S) PJ Volz, Matthew Helt	5. JOB TITLE Recreation Program	6. DATE PREPARED 10 January 2022
Required Standards and General Notes:	Knowledge of cutting tool edge angles. Appropriate sharpening and repair procedures. See FSH 6709.11 Ch. 40 for further guidance on safe practices with equipment and machinery.			
Required Personal Protective Equipment	Gloves, long sleeves, Eye protection (certain tasks), Ear protection (certain tasks), dust protection (certain tasks)			
Tools and Equipment	Vise, files, grinder, sandpaper, first aid kit, fire extinguisher			
Available Training	Tool care & reconditioning; Crosscut Saw Sharpening; USFS Video: An Axe to Grind			
7. TASKS/PROCEDURES		8. HAZARDS, POTENTIAL HAZARDS / INJURY SOURCE	9. ABATEMENT ACTIONS OR PROCEDURES Engineering Controls * Substitution * Administrative Controls * PPE	
Sharpening cutting edge of tools (using bastard mill file or grinder)		Cutting hands or arms with tool	<ul style="list-style-type: none"> Wear cut resistant or leather gloves and long sleeves. Use handle on file. 	
		Grinder throws sparks and metal filings	<ul style="list-style-type: none"> Wear eye and ear protection. Set up disk guard on grinder. Wear work apron. Know your facilities evacuation plan, including a meetup location. Ensure appropriate fire extinguisher is present, has been inspected, and is properly located. Ensure smoke detectors are in working condition. Ensure that the appropriate means of ingress/egress are available and sufficiently marked and lighted at all times. 	
		Tool moves during sharpening	<ul style="list-style-type: none"> Secure tool firmly held in vise or jig. 	
		Eye, back, or neck strain	<ul style="list-style-type: none"> Wear eye protection and/or face shield. Secure tool at a comfortable angle for sharpening. Ensure adequate lighting intensity and angle for observing sharpened edge. Consider stool and/or fatigue mat for workspace 	
Rehandling tools		Injury from loose or suddenly dislodge tool head	<ul style="list-style-type: none"> Wear sturdy boots that protect and support the ankle. Stay constantly aware of tool head stability. 	
		Crushed fingers	<ul style="list-style-type: none"> Keep fingers out of vise where they could be crushed. 	

	Smashed fingers or flying debris from setting wedge	<ul style="list-style-type: none"> • Wear eye protection. • Pay close attention to mallet or hammer swing.
	Cuts from wood rasp or hacksaw in shaping handle	<ul style="list-style-type: none"> • Wear long-sleeves and leather gloves.
	Dust and noise from shaping/sanding handles or tool heads	<ul style="list-style-type: none"> • Wear eye protection • Wear appropriate dust mask • Wear hearing protection
Reconditioning or marking handles	Combustion of linseed oil soaked rags	<ul style="list-style-type: none"> • Secure rags in marked and appropriately rated metal airtight can after use. • Empty can and properly dispose of rags regularly.
	Exposure to aerosol contents of spray paint; paint in eyes or on skin	<ul style="list-style-type: none"> • Paint tools outside or in a well-ventilated area. • Do not use materials that require a respirator. • Wear eye protection. • Wear appropriate gloves
Storing, cleaning, and testing tools and equipment	Injury from unsheathed tools	<ul style="list-style-type: none"> • Ensure tools are stored with appropriate guards on sharp edges
	Injury from objects falling due to improper storage	<ul style="list-style-type: none"> • Rather than store heavy or sharp objects in high places, store lighter equipment on upper shelves. • Use appropriately rated step ladders to access overhead items.
	Injury from items stored carelessly	<ul style="list-style-type: none"> • Store tools and equipment in balanced position where they are not precarious or prone to become imbalanced. • When possible, store hand tools in racks with handle hanging down. • Do not lean equipment against walls.
	Injury from slips, trips, falls	<ul style="list-style-type: none"> • Keep floor clear of tools, waste, or materials. • Clean up spills.
	Injury from use of faulty tool	<ul style="list-style-type: none"> • Tag tools needing repair with a "DO NOT USE" tag. • Store in a separate location if possible.
	Exposure to cleaning or conditioning chemicals	<ul style="list-style-type: none"> • Refer to manufacturer's handling and storage instructions. • Be aware chemicals can catch fire. • Store flammable liquids in original containers or approved and well marked containers. • Store containers in appropriately rated flammables cabinet. • Ensure shop is equipped with appropriate type, size of fire extinguisher and that it is inspected annually by a competent person. • Wear splash-proof eye protection and appropriate gloves when handling liquids.
	Injury from poorly maintained tool	<ul style="list-style-type: none"> • Check on/off switch for proper function • Perform maintenance at manufacturer's recommended intervals. • Keep bits, files, and knives sharp. • Do not modify tools.

		<ul style="list-style-type: none"> • Ensure all manufacturer safety components of tool are in working condition. • Tag-out tools not in safe working condition and note issue on tag. Add to Lockout Tag-out program.
10. OFFICIAL 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
