

U.S. Department of Agriculture Forest Service	WORK PROJECT/ACTIVITY: Puncheon Construction	LOCATION: Sawtooth National Recreation Area	UNIT: R4
JOB HAZARD ANALYSIS (JHA) References-FSH 6709.11 and -12 (Instructions on Reverse)	NAME OF ANALYST: Brian Malicki, Jay Dorr	JOB TITLE: Forestry Technician	DATE PREPARED: 6/7/2004

TASKS/PROCEDURES	HAZARDS	ABATEMENT ACTIONS
		Engineering Controls * Substitution * Administrative Controls * PPE
Sawing, sanding and machining treated wood, handling of treated wood.	Exposure to Chromated Copper Arsenate (CCA).	Avoid frequent or prolonged inhalation of sawdust from treated wood. Sawing, sanding and machining of treated wood should be performed outdoors while wearing personal protective equipment (PPE). PPE consists of a dust mask, goggles, hard hat, gloves, earplugs, leather boots, a long sleeve shirt and long pants. Because preservative or sawdust may accumulate on clothes, launder before reuse. Wash work clothes separately from another household clothing. Wear gloves when handling treated wood. After working with treated wood and before eating, drinking, toileting and use of tobacco products, wash exposed areas thoroughly.
Disposal of wood and wood scraps, cleanup.	Improper disposal and cleanup of CCA treated wood.	All sawdust and construction debris should be cleaned up and disposed of. Dispose of treated wood by ordinary trash collection. Do not burn in open fires or in stoves, fireplaces, or residential boilers because toxic chemicals may be produced as part of the smoke and ashes. Sweeping up of sawdust should be performed while wearing PPE.
Use of treated wood	Improper use of CCA treated wood.	Do not use treated wood where the preservative may become a component of food or animal feed (mulch, counter tops, beehives, containers for storing animal feed, etc.). Only treated wood that is visibly clean and free of surface residue should be used for patios, decks, and walkways. Do not use treated wood where it may come in to direct or indirect contact with drinking water except for uses involving incidental contact.
Transportation of Treated Wood	Exposure to CCA. Splinters, Head Injuries. Back Strains	Wear all PPE mentioned in row 1 of this JHA. When transporting boards make sure there is proper spacing between all workers. If boards require 2 people to transport them, use good communication. Do not carry more boards than is comfortable. If stock is to be used in the transportation of boards read the JHA on packing. When transporting wood in a vehicle ensure the load is secure and within the standards for the load capacity of the vehicle.
Hand Tools:		Wear all PPE mentioned in Row 1. Make sure all tools are in proper working order.
Nailing Hammers and Sledgehammers	Smashed fingers. Carpel Tunnels,	Maintain a secure grip on the tool near the handle end. Start hammering with light hits until you can clear your nail-holding hand. Concentrate on the nail head and place each hit carefully. To extract a nail, place the hammer head upside down on a flat surface. Move the claws so that the nail is positioned

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		between the two. Pull straight back towards your body. Sometimes a raised fulcrum might be necessary to remove larger nails.
Pulaski	Bodily Injury	When using the hoe, stand bent at the waist with your back straight and parallel to the ground. Knees flexed, and one foot slightly forward. Hold the handle with both hands and keep the tool at an angle to the body. Strike the ground with the corner of the hoe. When carrying the tool hold it at your side with the axe head pointed down.
Rock Bars	Personal Injury Broken Fingers, Arms, Legs, Ribs, Strained Back	Always ensure rock bar is in good working order with no visible cracks. Maintain the factory bevel on the tip with a file or grindstone. Always lay the bar down when not in use, NEVER lean it up against another object When operating the bar, use both hands. If the bar begins to bend, release the tension. If necessary, use a fulcrum for leverage. If a second bar is needed ensure there is good communication between the two operators. Do not put your hands under a rock while the rock bar is in use. Do not pry with the bar between your legs. Carry rock bar at your side, tip forward, with a good grip in the center to balance the weight.
Shovel	Broken toes strained back. Bodily Injury	When shifting or scooping materials bend at your knees and lift with your legs. When shoveling, support your upper body by bracing the forearm closest to your body against your thigh as you pivot the blade sideways. Carry the shovel with the head forward. Grip the handle near the head and hold it away from the body. Keep the edge sharp. Never use shovel as a pry bar
Log Carriers	Back injury, broken bones	Make sure hooks are secure in log. Hammer hooks if in doubt. Lift, walk, and set down on command and in unison. Make sure everyone understands commands. Clear route of tripping and slipping obstacles before moving log.
Come-a-longs or grip hoist	Anchors or chokers pulling out, cable breaking or coming off spool, wire rope splinters.	Wear gloves, make sure anchors are secure, make sure chokers are secure, inspect rope, pulleys, and all equipment and do not use if damaged. Keep everyone but operator out of area when operating equipment. Keep arms and other parts out of way of cable. Pull log only from a location out of way of potential log rolling or lunging.
Rock work	Crushed extremities, strained backs, loose footing	Keep your back straight, lift with your legs, and work in unison. Use a mechanical advantage with heavy rocks when available. If rock is too heavy, leave it alone.
Hand Transporting Fill Material	Strained back	Do Not fill gunnysack more than is reasonable to carry. Lift with your legs and hold sack close to your body. Take breaks if distance to work site is long.

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Lifting	Back Injury/hernia	Lift with the legs. Hold object close to body. Ask for help if needed. Use mechanical devices when objects are too large or heavy.
Working In Groups	Personal Injury, Injury to Coworkers, Small Working Areas	Ensure proper spacing between coworkers. There are usually a number of jobs being performed at one time, so communication is essential. Make sure everybody around knows what you are doing and where you are going.

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
