

U.S. Department of Agriculture Forest Service	1. WORK PROJECT/ACTIVITY Hand power tools – including: drills, circular saw and reciprocating saw	2. LOCATION All SNRC Field Locations	3. UNIT SNRC
JOB HAZARD ANALYSIS (JHA) References-FSH 6709.11 and 12 (Instructions on Reverse)	4. NAME OF ANALYST Sean Eagan	5. JOB TITLE Hydrologist	6. DATE PREPARED 02-03-2003
7. TASKS/PROCEDURES	8. HAZARDS	9. ABATEMENT ACTIONS Engineering Controls * Substitution * Administrative Controls *PPE	
<p>Work with portable power tools</p>	<p>Bodily injury resulting from a: Cluttered work area</p> <p>Slipping</p> <p>Inexperience or being rusty</p> <p>Eye injury</p> <p>Hearing injury</p> <p>Electrical shock</p> <p>Entanglement (clothing or cords)</p>	<p>The work area should be free of tripping hazards. If working outside be sure you are in a stable position if ground is uneven. Avoid awkward positions where possible. Do not work directly above other employees or within arms reach of other employees. Do not work after dark or with poor lighting.</p> <p>Do not work in slippery conditions. Wear non-slip leather shoes or boots.</p> <p>Train all users of power tools. Read and understand the operators manual. Know the tools proper application and limitations. Stay alert. Do not operate the tool when you are overtired. New employees should work with an experienced employee familiar with the tool for at least 10 minutes or until you are comfortable with the tool. Never allow the new employee to work alone until they have demonstrated the ability to use the tool in a safe manner.</p> <p>Safety goggles (or protective glasses) should always be worn when using power saws. EVERY CUT!</p> <p>Wear ear protection when using tools for extended periods (>10 minutes).</p> <p>Make sure that the tool is in good condition, the battery is firmly in place. Do not set battery tools in water or snow. For corded tools, make sure cord is not frayed ,and that the ground plug is in place. Extension cords should be grounded. Avoid working in wet areas. Ground tools when using generators. Tools with bad cords or missing ground plug should be red tagged and not used. Keep tools unplugged when not in use.</p> <p>Secure all loose clothing and long hair. Be aware of cord locations and keep away from drill or saw. Keep chuck key clear of drill or saw before plugging in. Electrical hand saws and drills must have quick release trigger.</p>	

<u>Tool specific</u>		
Circular saw	<p>Loss of digits and deep cuts</p>	<p>Guards should remain in place and be correctly adjusted Keep both hands on the saw's two handles: that way they can not be cut. Keep your body positioned to either side of the blade to avoid kickback. (wear safety goggles). Do not reach under the material being cut. Use blade recommened for material being cut. Never jam saw into work. Unplug or remove battery when changing blades. Check blades regularly and keep in good condition. Keep proper footing and balance. Use clamps or vises to hold work when practical. Adjust saw to appropriate depth. Cut green, treated or wet material slowly and with caution.</p>
Drills-18 and 24 volt	<p>Exposure to dust</p> <p>Accidental starts leading to drilled pants or leg.</p> <p>Broken wrist from excessive torque</p> <p>Use the correct bit</p> <p>Using hammer mode</p>	<p>Operators exposed to dust, as when cutting concrete, tile , treated wood or stone, shall wear approved respirator (mask). Work in ventilated area when cutting treated lumber.</p> <p>Always remove bit after task and consider removing battery pack. Do not carry drill with your finger on the trigger. Keep switch in locked or off position when transporting or switching batteries.</p> <p>Hold 24-volt drill in a comfortable position and with two hands This drill has enough torque to break your wrist. Use 18-volt drill when working off the ground or in awkward positions.</p> <p>Inspect drill bits regularly and use the recommended bit for material being drilled. Clamp down small material. Hold large material firmly. Use the correct drill speed. (wear safety goggles)</p> <p>Use both handles and wear ear protection in addition to goggles</p>
Reciprocating saw	<p>cuts</p> <p>electric shock</p> <p>cutting things underneath intended board</p>	<p>Do not hold work against your body. Avoid holding wood with your hand. (wear safety goggles and ear protection)</p> <p>Be careful of cutting into wall which may have electric lines in them. Turn off power to the building.</p> <p>Take precautions not to cut material below the intended board. Follow safety instructions in operator handbook.</p>
10. Name /s/ Peter Stine	11. Title Program Manager	12. Date 6/12/2006

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.

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:

SIGNATURE	DATE	SIGNATURE	DATE
------------------	-------------	------------------	-------------

_____	_____	_____	_____
Work Leader			
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____