

U.S. Department of Agriculture Forest Service	1. WORK PROJECT/ACTIVITY Pile Burning	2. LOCATION Various	3. UNIT 02-54
JOB HAZARD ANALYSIS (JHA) References-FSH 6709. 11 and -12 (Instructions of reverse)	4. NAME OF ANALYST	5. JOB TITLE	6. DATE PREPARED

7. TASKS/PROCEDURES	8. HAZARDS	9. ABATEMENT ACTIONS Engineering Controls * Substitution * Administrative Controls * PPE
Travel to, from and on Project	Motor Vehicle accident. Slippery road surfaces. Soft Shoulders Narrow roadways Weather Smoke Darkness Other road Users Backing	Perform peruse inspections on equipment. Observe the "Circle of Safety" rule. All FS employees who operate Government vehicles shall hold a valid state driver's license with proper endorsements for the size and class being driven and a FS issued identification card indicating the type of vehicle or equipment the operator is authorized to operate. (FSM 7134.1). Use seat belts. Drivers must attend a FS or National Safety Council defensive driving course at least every 3 years. Identify road conditions during briefings. Post road guards if needed. Mark hazards. Use headlights. Scout roads and identify turnouts before ignition of project. Maintain radio communications. Provide road system map for project. Use backers and chock vehicle's tire. Have vehicles facing out. Know and observe all state and local traffic regulations.
Qualifications For assigned Position	Lack of Experience	Employees recruited for burn assignments shall meet age,health and physical requirements established for regular firefighting duties. (5109.16) Also meet Prescribed Burn qualifications
Briefing / Tailgate Safety & Health Sessions	Lack of Communications	Provide Briefings and Tailgate Safety Sessions. Document briefings and sessions. Clarify firing order, organization responsibilities, communications, hazards, weather and expected fire behavior.
Protective Clothing and Equipment	Injuries Falls Burns Death	Wear approved hard hat with chin strap, safety glasses, flame resistant fabric pants and shirts NPFA 1977 compliant. keep sleeves rolled down. Avoid undergarments and socks made of 100 percent, or a high percentage of, polyester, nylon or acrylic. Wear leather, lace type, boots with skid resistant soles, and tops at least 8"

		<p>high. Carrying drinking water and fire shelter. Wear OSHA approved firefighting gloves. Wear hearing protection when working around equipment where noise level exceeds 85 dba. Wear additional protective equipment as dictated by local conditions and exposure to special equipment.</p>
Lighters	<p>Injuries Death Falls Snags Bees Snakes Smoke Rolling material</p>	<p>Always have an escape route. Maintain LCES. Follow the Standard Fire Orders and Watch Out Situations. Maintain communications with other lighters and RX Fire Ignition Specialist. Hand Held radios shall be provided to all lighters. Lighters shall be trained in the use of Drip Torches. Do not fill drip torches near ignition sources. Do not spill burn mix on clothing. Be alert to foreign objects dumped in burn pile.</p>
Fuel Mixing	<p>Burns Spills Fuel saturated clothing and boots Improper labeling Explosive</p>	<p>Transport fuel in approved, labeled containers secured in vehicle beds. Park and secure vehicles hauling flammables / combustibles in a separate, predetermined, safe area. No smoking within 25 feet of mixing and filling area. Do not fill or mix in pick ups bed with bed liners. Avoid use of cellular phones in and around fill or mixing area. Avoid fuel contact with bare hands, clothing and boots. Provide pour spouts. Follow fuel mixture ratio in the Health and Safety Code Handbook.</p>
Holding / Mop Up / Patrol Crew	<p>Smoke Burns Falls Back Injuries Bees Snakes Posion Oak Snags Rolling Material Heat Stress Dehydration Eye Injuries CO Posioning</p>	<p>Wear PPE's listed above. Protective clothing and equipment shall be the same as required for firefighting. LCES, Follow Standard Fire Orders and Watch Out Situations. Receive briefing from Holding and Mop Up Boss. Identify and mark hazards in work area. Use warning lights and provide traffic control on roadways during smoky and nights operations. Maintaining a high level of aerobic fitness is one of the best ways to protect yourself against heat stress. Drink lots of fluids before, during and after work. Periodically rotate crews from work sites with high levels of smoke to areas of less smoke or smoke free areas. Set a reasonable work pace and allow adequate rest breaks while on the project. Crews shall follow all guidelines in the NWCG</p>

		Fireline Handbook Chapter 5 Firefighting Safety (Rev. 9/98). Maintain communications with the ECC Monitor personnel for symptoms and behavior associated with CO exposure and take appropriate action when necessary.
Hand Tools Pitch Forks	Puncture Wounds	Ensure that tools remain in safe condition through periodic inspection and repair. Monitor employee performance periodically to ensure proper methods are used. Handles must be free of splinters, splits and cracks. Pitch forks not in use on the project should be stored standing with forks in ground.
Workplace	Injury or Threat of violence	Violence occurs at different levels of intensity, and usually increases overtime. In order to prevent violence from escalating, employees and supervisors need to pay attention to the work environment, recognize the signs of possible violence early, and take all necessary actions to reduce the risk to life and property. Violent people may come from inside or outside your organization. Call ECC for law enforcement if needed.
Emergency Evacuation Procedures (EEP)	Illness/Injuries	On site FS engines shall have BLS equipment to initiate basic life support until responsible medical first responders arrive. Notify ECC request medical response from responsible medical first responders. Provide type of injury, location, access and number of patients. Follow San Diego County EMS protocol. Identify EMT's and available medical equipment on project during briefing / tailgate safety session. Notify supervisor of injury. Complete necessary paperwork.

10. LINE OFFICER SIGNATURE	11. TITLE	12. DATE
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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
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Work Leader			
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