FIRE PLAN FOR CONSTRUCTION AND SERVICE CONTRACTS
4-19-2005
(Ref: FSH 6309.32 and 6309.11)

1. **SCOPE:**

The provisions set forth below outline the responsibility for fire prevention and suppression activities and establish a suppression plan for fires within the contract area. The contract area is delineated by map in the contract. The provisions set forth below also specify conditions under which contract activities will be curtailed or shut down.

2. **RESPONSIBILITIES**:

A. Contractor

(1) Shall abide by the requirements of this Fire Plan.

(2) Shall take all steps necessary to prevent his/her employees, subcontractors and their employees from setting fires not required in completion of the contract, shall be responsible for preventing the escape of fires set directly or indirectly as a result of contract operations, and shall extinguish all such fires which may escape.

(3) Shall complete the Contractor's Plan Regarding Personnel and shall furnish the Contracting Officer (CO) with a copy prior to commencing work at the site. Shall currently advise the CO of any changes in personnel as the changes occur. Shall revise Section 6.B to reflect current activities upon request of the CO.

B. Forest Service

The Forest Service may conduct one or more inspections for compliance with the fire plan. The number, timing, and scope of such inspections will be at the discretion of agency employees responsible for contract administration. Such inspections do not relieve the Contractor of responsibility for correcting violations of the fire plan or for fire safety in general, as outlined in paragraph 2.A above.

3. **TOOLS AND EQUIPMENT:**

A. The Contractor shall comply with the following requirements during the fire precautionary period as defined by unit administering contracts unless waived in writing:

The Fire Precautionary Period is **May 01 to Dec 01**.

Shall equip all diesel and/or gasoline-operated engines, both stationary and mobile, and all flues used in any contract and camp operations with spark arresters that meet Forest Service standards set forth in the National Wildfire Coordinating Group publication for Multiposition Small Engines, #430-1, or General Purpose and Locomotive, #430-2. Spark arresters are not required on equipment powered by exhaust-driven turbo-charged engines or motor vehicles equipped with a maintained muffler as defined in California Public Resources Code (CPRC), Section 4442 and 4443.

Shall furnish and have available for emergency use on each piece of equipment used in conjunction with performance of the work as listed below, hand tools and/or equipment as follows (CPRC 4427, 4428 and 4431):

(1) One shovel, one axe (or pulaski) and a fully charged fire extinguisher U.L. rated at 2-A:10-B:C**,** or larger, on each truck, personnel vehicle, tractor, grader and other heavy equipment. Contractor shall equip each mechanized harvesting machine with hydraulic systems, powered by an internal combustion engine (chipper, feller/buncher, harvester, forwarder, stroke delimber, etc), except tractors and skidders, with at least two 4A:80-B:C fire extinguishers, or equivalent. In addition, concentrations of wood dust and debris shall be removed from such equipment daily.

(2) One shovel and one backpack 5 gallon water-filled tank with pump with each welder.

(3) One shovel and one pressurized chemical fire extinguisher for each gasoline-powered tool, including but not restricted to chain saws, soil augers, rock drills, etc. Fire extinguishers shall be of the type and size set forth in the California Public Resources Code Section 4431. Shovel must be kept within 100 feet from each chain saw when used off cleared landing areas.

(4) The Contractor is ( ) is not (X) required to furnish a sealed box of fire fighting tools, to be located in the operating area, at a point accessible in the event of fire. This box shall contain:

- _____ 5-gallon, backpack pump-type fire extinguisher filled with water;
- _____ axes;
- _____ McCleod fire tools;
- _____ serviceable chain saw of three and one-half or more horsepower with a cutting bar 20 inches in length or longer;
- _____ shovels so that each employee at the operation can be equipped to fight fire.

The box shall remain unlocked, but be sealed with a Forest Service seal to be broken for emergency use only.

All tools and equipment required above shall be in good workable condition and shall meet the following Forest Service requirements for fire tools:

(a) Shovels shall be size "O" or larger and be not less than 46 inches in overall length.

(b) Axes (or pulaskis) shall have 2-1/2 pound or larger heads and be not less than 28 inches in overall length.

The Contractor is (X) is not ( ) required to furnish a water tank truck or trailer on or in proximity to the contract area during the Fire Precautionary Period and meet the following minimum specifications: contain at least 300 gallons of water; a combination straight stream-fog nozzle with 300 feet of one-inch fire hose, with no segment longer than 50 feet; fire hose with nozzle closed shall be capable of withstanding 200 psi pump pressure without leaking, slipping of couplings, distortions, or other failures; nozzle discharge rating of six to 20 gallons per minute; a pump capable of delivering 23 gallons per minute at 175 pounds psi at sea level; power unit for pump shall have fuel for at least two hours operation, with ample transport available for immediate and safe movement of tank over roads serving the contract area; and shall be in good working order; pump outlet shall be equipped with 1-1/2 inch National Standard Fire Hose thread.

Shall furnish two tractor headlights for each tractor dozer, tractor headlights shall be attachable to each tractor and served by an adequate power source

B Any additional fire plan requirements:

1. Under the water tank requirements replace 300 feet of one inch hose with 600 feet.

2. An alternative to the requirement of a 300 gallon water tank truck is to furnish a mobile unit capable of accessing the trail segments that can provide a Class A suppression system capable of extinguishing a 20 by 20 foot wildland fire within 5 minutes of discovery. See footnote 1/ in Section 5.

4. **GENERAL**

A. **State Law**. The Contractor shall comply with all applicable laws of the State of California. In particular, see California Public Resource Codes.

B. **Permits Required**. The Contractor must secure a special written permit from the District Ranger or designated representative before engaging in any of the activities listed below. The terms and conditions of any of the permits required for this contract are as shown on copies attached to the Fire Plan.

(1) Blasting and Storage of Explosives and Detonators. (Explosives Permit required by California Health & Safety Code, Section 12101.)

(2) Burning.

(3) Air Pollution. (Issued by local State or County Air Pollution Control Districts, as applicable.)

(4) Camp, Lunch and Warming Fires.

(5) Welding and Cutting.

C. **Regulations for Burning**. Before setting any fires whatsoever, the Contractor shall notify the CO of his/her intentions. Special care shall be taken to prevent scorching or causing any damage to adjacent structures, trees, and shrubbery. Piles of material to be burned shall be of such size and so placed that during burning no damage shall result to adjacent objects.

D. **Smoking and Fire Rules**. Smoking shall not be permitted during fire season, except in a barren area or in an area cleared to mineral soil at least three feet in diameter (CPRC 4423.4). In areas closed to smoking, the CO may approve special areas to be used for smoking. The Contractor shall sign designated smoking areas. Contractor shall post signs regarding smoking and fire rules in conspicuous places for all employees to see. Contractor's supervisory personnel shall require compliance with these rules. Under no circumstances shall smoking be permitted during fire season while employees are operating light or heavy equipment, or walking or working in grass and woodlands.

E. **Storage and Parking Areas**. Equipment service areas, parking areas, and gas and oil storage areas shall be cleared of all flammable material for a radius of at least 10 feet unless otherwise specified by local administrative unit. Small mobile or stationary internal combustion engine sites shall be cleared of flammable material for a slope distance of at least 10 feet from such engine. The COR shall approve such sites in writing.

F. **Welding**. Contractor shall confine welding activity to cleared areas having a minimum radius of ten feet measured from place of welding.

G. **Blasting**. Contractor shall use electric caps only. When blasting is necessary in slash areas, a watchperson equipped with shovel and a water-filled backpack can (5 gallon), with hand pump, shall remain in the immediate area for an hour after blasting has been completed.

H. **Oil Filter and Glass Jugs**. Contractor shall remove from National Forest land all oily rags and used oil filters. Contractor shall prohibit use of glass bottles and jugs on contract operations.

I. **Reporting Fires**. As soon as feasible, after initial control action is taken, within 1 hr, the contractor shall notify Forest Service of any fires along roads or project area within designated contract.

J. **Communications**. Contractor shall furnish an agreed upon communication system connecting each operation with the designated Forest Service Dispatch Center. The communications system shall be capable of contacting the designated Forest Service Dispatch Center within five (5) minutes of discovery of a fire in the Contractor's operating area. The communications system shall be operable during the Contractor's operation in the fire precautionary period.

K. **Fire Patrol Person**. When required, the sole responsibility of the patrol person shall be to patrol the operation for prevention and detection of fires and to take suppression action where necessary. By agreement, one patrol person may provide patrol on this and adjacent projects.

5. **EMERGENCY MEASURES**

The table set forth below establishes work restrictions and fire precautions that the Contractor must observe at each activity level. The restrictions are cumulative at each level.

Contractor shall conform to the limitations or requirements of Project Activity Level (PAL) obtained from Forest Service before starting work each day. If practicable, Forest Service will determine the following day's activity level by 4:00 PM each afternoon**.** The Contractor can obtain the PAL for the following day by calling, after 4:00 PM, the following phone number (707)-457-3131. Activity level may be changed at any time if, in the judgment of the Forest Service, fire danger is higher or lower than predicted and such change is consistent with forest management objectives. The decision to change the activity level, and when, and how to take weather observations for that purpose, are within the discretion of Forest Service.

PROJECT ACTIVITY LEVELS

Contractor & Forest Service may agree to a variance for operations at levels, B, C, D & Ev.

Level	***Project Activity Requirements***	***Additional Project Activity Requirements Using Hotsaw Technology (generally rotary heads operating at >1100 rpm)***
A	Minimum required by Section 3	Same as Project Activity Requirements
B	1. Furnish fire patrolperson. A fire patrolperson is required for mechanical operations from cessation of operations until 2 hours after operations cease or sunset, which ever occurs first 2. Tank truck or trailer shall be on or adjacent to landing (Section 3).	Same as Project Activity Requirements.
C	1. Fire patrolperson is required until sunset local time. 2. The following operations are prohibited from 1:00 PM until 8:00 PM local time: a. Blasting	Operations are prohibited between 1:00 PM and sunset local time. Operations may continue if they meet the following requirements: 1. A fire patrolperson is required for each piece of equipment until sunset local time. 2. Provide periodic (once per hour) inspection of areas treated that day. 3. Provide on-board self extinguishing fire suppression system on each piece of equipment capable of extinguishing any equipment related fire or provide a portable Class A fire suppression system capable of extinguishing a 20 foot by 20 foot wildland fire within five minutes of discovery. 1/
D	All following activities may operate: 1. Rubber tired skidding 2. Chipping on roads or landings 3. Cable yarding 4. Loading of logs decked at landings 5. Welding or cutting of metal only by special permit 6. Road maintenance 7. Culvert installation 8. Dirt moving 9. Helicopter Yarding 10. Hand slash disposal 11. Chainsaw operations on landings and roadbeds All other operations may continue after 1:00 PM local time, if they meet the following requirements: A fire patrolperson is required to walk all areas treated that day once per hour, until sunset local time. This includes chainsaw felling, metal track skidding, machines with chainsaw cutting heads and mastication equipment.	Same requirements as listed in PAL C:

Ev	All following activities may operate: 1. Hauling and loading of logs decked at landings 2. Equipment at approved sites may be serviced. 3. Roads: Dust abatement or rock aggregate installation (does not include pit development) 4. Chainsaw operation associated with loading All other operations may continue until 1:00 PM local time when Contractor and Forest Service agree to variance.	Operations are prohibited, except variances are permitted for operations until 1:00 PM local time when Contractor and Forest Service agree to additional precautions. Minimum requirements: At this level, the following types of equipment shall be immediately available within one quarter mile of the activity to quickly reach and effectively attack a fire start: tractors, skidders or other equipment with a blade capable of constructing fireline, plus PAL level D requirements.
E	The following activities may operate: 1. Hauling and loading of logs decked at landings 2. Equipment at approved sites may be service. 3. Roads: dust abatement or rock aggregate installation (does not include pit development 4. Chainsaw operation associated with loading	Operations are prohibited

1/ Suppression system equipment minimum requirements: 100 feet of one inch hose, minimum discharge distance of 50 feet, minimum pressure 100 PSI at discharge orifice, and sustainable for a minimum of 5 minutes.

6**. REPORTING ALL WILD FIRES**

A. Contractor's employees shall report all fires to any of the following Forest Service facilities and/or personnel listed below, but not necessarily in the order shown:

	Name	Office Address and/or telephone	Home address and/or telephone
Nearest FS Station	Orleans Ranger Station	(530) 627-3291	
Alternative FS Station	Lower Trinity Ranger Station	(530) 629-2118	
Dispatch	Northcoast Dispatch	(707) 441-3644	
COR	Peter Meingast	(707)362-5262	(815) 520-4419
COR	Belen Gomez	(707) 441-3633	(562) 294-9674

When reporting a fire, provide the following information;

` Your Name;
Call back telephone number;
Project name;
Location;
Legal description (Township, Range, Section); and
Descriptive location (Reference point);
Fire Information;
Acres;
Rate of Spread; and
Wind Conditions.

B. **Contractor's Plan Regarding Personnel.** The Contractor shall, prior to commencing work, furnish the following information relating to key personnel

Title	**Name**	**Address and/or telephone**
Fire Patrolperson		

Project Activity Level Climatology

Station/SIG/Unit: Areas 112/113/115 **Years Analyzed** 2005-2014

Month	A	B	C	D	Ev	E	Days Analyzed	
	Expected Days per Month at each PAL Value							
May	12.8	9.9	7.1	1.0	0.1	0.1	305	31
June	6.7	7.3	11.9	3.9	0.1	0.0	299	30
July	0.5	3.3	15.6	9.0	2.6	0.0	310	31
August	0.0	1.2	13.5	12.9	3.4	0.0	310	31
September	1.5	3.2	14.3	7.9	3.1	0.0	300	30
October	10.9	9.3	10.3	0.3	0.2	0.0	310	31
November	18.0	12.0	0.0	0.0	0.0	0.0	10	30
	50.4	46.2	72.8	35.0	9.5	0.1	1844	

Month	A	B	C	D	Ev	E		
	Percent of Days per Month at each PAL Value							
May	41.3	31.8	23.0	3.3	0.3	0.3	305	100
June	22.4	24.4	39.8	13.0	0.3	0.0	299	100
July	1.6	10.6	50.3	29.0	8.4	0.0	310	100
August	0.0	3.9	43.5	41.6	11.0	0.0	310	100
September	5.0	10.7	47.7	26.3	10.3	0.0	300	100
October	35.2	30.0	33.2	1.0	0.6	0.0	310	100
November	60.0	40.0	0.0	0.0	0.0	0.0	10	100
							1844	