

INFORMATION HANDOUT

For Contract No. 07-2W, ' 04

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ROAD MAINTENANCE FIRE PLAN
ANGELES NATIONAL FOREST



FIRE PLAN AND PROJECT ACTIVITY LEVELS FOR PAVED ROAD
SERVICING AND MAINTENANCE

AUGUST 2012

California Department of Transportation (Caltrans)

Los Angeles County Department of Public Works

San Bernardino County Department of Public Works



Purpose of the plan

This fire plan is designed to assist in safe practices to prevent wildfires on the Angeles National Forest when paved road maintenance is performed.

The plan includes information on Project Activity Levels (PAL) and a general fire plan for construction and service projects. The PAL includes a chart which has a fire danger Level A through Level EV. Associated with the PAL Levels, are various types of road maintenance activity to assist agencies in determining what types of road maintenance work that can be performed on a given day based upon the fire danger level.

What is the Project Activity Level (PAL) ?

The Project Activity is a scientifically based system to regulate all industrial and contractual activities on National Forest System lands in California. The PAL is designed to reduce the risk of large damaging wildfires and legal vulnerability of the agency, contractors, and permittees. The system is fire danger and climatology based using Energy Release Components (ERC) and Ignition Components (IC) to determine ratings. The system provides a single decision support matrix for regulating industrial and service activities on the Angeles National Forest.

Instructions for Obtaining the PAL Information

A PAL hotline is available from the Angeles National Forest Emergency Communications Center at (661) 723-2752.

The PAL is listed by weather stations or PAL area as listed in this plan. The table lists the various roads on the Angeles National Forest and the PAL area that corresponds with location of the road. As an example, if road maintenance was to be performed on Bouquet Canyon Road, The PAL area for that road is "Warm Springs". Reference is then made to the PAL chart to ascertain what types of maintenance activities are permitted under the given fire danger level A through E. Level A represents the lowest fire danger while Level E represents the highest fire danger. Under Level EV, certain types of work may proceed with a "Variance" issued by the Forest Service where the County or State Agency agree to specified fire prevention measures to mitigate the start of a wildfire.

Spark Arresters:

A USDA Forest Service approved spark arrester is required on all internal combustion engines. Exceptions are any heavy equipment that is diesel powered and equipped with a turbo charger that recycles 100 percent of the exhaust. Also exempt are any vehicles such as dump trucks that are licensed and are otherwise registered for legal highway travel. (See Fire Plan Section 3 A.) Note: USDA Forest Service Spark Arrester Guide for approved arresters is available on line at: <http://www.notes.fs.fed.us:81/r5/regional/sag.nsf>.



FIRE PLAN FOR CONSTRUCTION AND SERVICE CONTRACTS

04-26-04

**Project: Paved Road Maintenance –Caltrans, Los Angeles County Dept. of Public Works,
San Bernardino County Dept of Public Works.**

AUGUST 2012

**(Ref: FSH 6309.32 and 6309.11)
Angeles National Forest**

1. SCOPE:

The provisions set forth below outline the responsibility for fire prevention and suppression activities and establish an attack procedure 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. See Section 5, Emergency Measures below.

2. RESPONSIBILITIES:

A. Contractor / Agency

- (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 /Agency's Plan Regarding Personnel, Equipment and Organization (6.B) 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, equipment and organization 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 committed at the discretion of agency employees responsible for contract administration. Such inspections do not relieve the Contractor / Agency 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:

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 Coordinating Group publication for Multiposition Small Engines, #430-4, 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.

B. 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):

(a) 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 / Agency shall equip each mechanized harvesting machine with hydraulic systems, powered by an internal combustion engine (chipper, feller/ buncher, harvester, forwarder, stroke delimeter, etc), except tractors and skidders, with at least two 10 lb 4A/60 B-C fire extinguishers, or equivalent. In addition, concentrations of wood dust and debris shall be removed from such equipment daily.

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

(c) 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.

C. All tools and equipment required in (1) and (2) above shall be in good workable condition and shall meet the following principle Forest Service specifications for fire tools:

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

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

D. Shall furnish a water tank truck or trailer, if so designated in Section 5.F. Tank truck or trailer shall be located on or immediately adjacent to the contract area 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.

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.** (No debris or pile burning)
 - (3) **Air Pollution.** (Issued by local State or County Air Pollution Control Districts, as applicable.)
 - (4) **Camp, Lunch and Warming Fires. NO OPEN WOOD OR CHARCOAL FIRES**
 - (5) **Welding and Cutting.**-Obtain from local Forest Service District Office **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
- C. **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. Designated smoking areas shall be signed by the Contractor. 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.
- D. 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 inflammable material for a radius of at least 50 feet. Small mobile or stationary engine sites shall be cleared of inflammable material for a radius of at least 15 feet from such engine. The Contracting Officer's areas must be approved, in writing, by the Contracting Officer.
- G. **Welding.** Contractor shall confine welding activity to cleared areas having a minimum radius of ten feet measured from place of welding.
- H. **Blasting.** Contractor shall use electric caps only. When blasting is necessary in slash areas, 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.
- I. **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.
- J. **Reporting Fires.** As soon as feasible, after initial control action is taken, Contractor shall notify Forest Service of any fires along roads used by Contractor. **REPORT FIRES TO THE ANGELES NF DISPATCHER CALL 911 OR (661) 948-6082**
- K. **Communications.** If required in Section 5.H below, Contractor shall furnish a serviceable telephone, radio-telephone, or radio system connecting each operation with the designated Forest Service Dispatch Center. A radio-equipped fire patrolperson vehicle will satisfy this requirement if in operation during the time required. The communication system shall provide prompt and reliable communications between

the Contractor's operations and the Forest Service Dispatch Center. The communications system shall be operable during Contractor's operation in the fire precautionary period and at the time fire patrolperson service is required. 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.

5. EMERGENCY MEASURES-----PROJECT ACTIVITY LEVELS

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

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 p.m. each afternoon. 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.

PAL applicable to this project shall be for Fuel Model G, National Fire Danger Rating System, and Remote Automated Weather Station (RAWS) or fire danger rating area stated in the legend of Project Area Map.

All of the precautions listed above apply unless the Contracting Officer agrees to changes in writing. Such written agreement, or substitute precautions, shall prescribe measures to be taken by Purchaser to reduce the risk of ignition, and/or the spread of fire.

- A. The Contractor / Agency can obtain the Predicted Project Activity level for the following day at telephone number: (661) 723-2752
- B. The Contractor / Agency will not be 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: one 5-gallon, backpack pump-type fire extinguisher filled with water; two axes; two McCleod fire tools; one serviceable chain saw of three and one-half or more horsepower with a cutting bar 20 inches in length or longer; and enough 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.
- C. The Forest Service will not furnish box of fire fighting tools, the contents of which is within the discretion of agency employees at the district level. The Contractor shall ensure that the box remains unlocked but sealed with a Forest Service seal to be broken for emergency use only. The Contractor will be responsible for keeping the box in the operating area, at a point accessible in the event of fire, and will return it to the government upon completion of the work. The cost of replacing any shortage of tool inventory or loss or damage to the box will be withheld from the final contract payment due the Contractor.
- D. The Contractor / Agency will not be required to furnish a filled five gallon backpack pump at each work site at activity level C, or above.
- E. The Contractor / Agency will not be required to furnish a fire patrol with a filled 5-gallon backpack pump to prevent, detect, and suppress any fires in the contract area. The patrol shall remain on duty at least two hours after the close of work on PAL Level C and below for road side high speed rotary head and mastication activity.
- F. The Contractor/ Agency will be required to furnish a water tank truck or trailer. Water tank truck or trailer may not be used for other work on the contract. (See PAL Level requirements.)

G. The Contractor / Agency will not be required to furnish tractor headlights.

H. The Contractor / Agency will not be required to furnish communications equipment.

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
Dispatch Center	Incident Dispatcher		
Nearest FS Station			
COR			
District Ranger			
D.R. Designated Rep			

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 / Agency Plan Regarding Personnel, Equipment and Organization.** The Contractor / Agency shall, prior to commencing work, furnish the following information relating to key personnel, tools and equipment available for the purpose of fighting wild fires within and adjacent to the contract / work area.

(1) **Key Personnel:** (In order of call preferences)

Title	Name	Address and/or telephone

Equipment Type	Manufacturer/ Model #	Spark Arrester Make/ Model	Seviceable Shovel/ Axe /Fire Extinguisher

LEVEL

PROJECT ACTIVITY REQUIREMENT

A As required by Sections 1 through 6 in the Fire plan above for normal maintenance activity.

B As required by sections 1 through 6 in the Fire Plan above for normal maintenance activity

C 1a. A fire patrol person is required until 1 hour after operation or sunset whichever occurs first..

Hazard reduction along roadways:

1b. For rotary head machinery operating at >1100 rpm's (including all flail and mastication machinery) a water truck is required for each piece of equipment. The water truck is to follow immediately behind the equipment and be ready to extinguish any fire starts. Water truck is to patrol area ONE HOUR after the close \ of work or sunset local time, whichever occurs first. Use of this equipment should be conducted between December 15 and August 1 each year due to potential fire risk.

2. The following operations are prohibited from 1:00 PM until 8:00 PM local time:

- a. Dead trees felling, limbing, or bucking except recently dead trees.
- b. Blasting
- c. Welding, metal grinding and cutting unless by special permit

D All the following may operate all day:

1. Road maintenance including shoulder grading.
2. Maintenance of cleared berms and turnouts.
3. Culvert installation.
4. Sign post, guard rail, snow pole, curb, rock wall and headwall repairs.
5. Culvert marker maintenance.
6. Retaining wall maintenance and repair.
7. Graffiti abatement.
8. Drain inspection.
9. Dirt moving.
10. Slash chipping in 20 ft. cleared area / on roads or landings ONLY.

D Continued

The following operations are prohibited from 1:00 PM until 8:00 PM local time. These operations may continue after 1:00 PM local time if they meet the following:

A fire patrol person is required to walk all areas treated once per hour after operations cease or sunset, whichever occurs first.

1. All falling, limbing, bucking, and other clearing operations.
2. Sloughage and vegetation removal.
3. Slide removal.
4. Pavement repairs / crack sealing, with 2 -20 lb BC extinguishers.
5. Pavement repairs / pothole patching.
6. Chipping on roads or landings.
7. Chainsaw operations on landings and roadbeds.
8. Mechanized loading and hauling except trucks already at cleared landing.
9. Hand felling of green or recently dead material such as bugged trees, may continue as determined by the DRR.
10. Any other spark-emitting operation by special permit.

The following activities are prohibited all day or as conditioned:

1. Road clearing and pioneering in un-cleared areas.
2. Mechanized slash disposal except as noted above.
3. Dead tree felling, limbing, or bucking except recently dead trees only by special permit.
4. Welding, metal grinding, and cutting only by special permit.
5. Blasting
6. No operation of high speed rotary equipment including weed-eaters after 1:00 PM

Hazard reduction along roadways:

Use of machinery below my operate until 1:00 PM

For rotary head machinery operating at >1100 rpm's (including all flail and mastication machinery) a water truck is required for each piece of equipment. The water truck is to follow immediately behind the equipment and be ready to extinguish any fire starts. Water truck is to patrol area ONE HOUR after the close of work or sunset local time, whichever occurs first. Use of this equipment should be conducted between December 15 and August 1 each year due to potential fire risk.

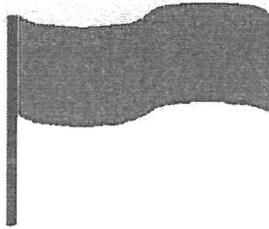
EV Operations are prohibited, except written variances are permitted for Operations until 1:00 PM local time when the contactor, permittee, or agency and the Forest Service agree to fire prevention measures to mitigate the start of a wildfire.

Otherwise ONLY the following activities may proceed:

1. Rock runs along highways for rocks and other debris.
2. Clearance of slide and debris material along highway and cleared turnout.
3. Material can be transported to cleared area. (NO PIONEERING).
4. Maintenance of cleared berms and turnouts.
5. Guardrail repair with handtools.
6. Emergency down tree or slide removal in uncleared areas of vegetation requires
7. an approved 300 gallon water truck and operator on scene. (See Section 3-D in the Fire Plan).
8. Hauling and loading of construction material, and trash decked at approved landings or main staging area.
9. Roads: Dust abatement or rock aggregate installation. (Does not include pit development.)

E The following activities ONLY may operate:

1. Rock Runs along highways for rocks and other debris.
2. Clearance of slide and debris material along highway and cleared turnout. Material can be transported to cleared area. (NO PIONEERING).
3. Maintenance of cleared berms and turnouts.
4. Guardrail repair with handtools.
5. Emergency down tree or slide removal in uncleared areas of vegetation requires
6. an approved 300 gallon water truck and operator on scene. (See Section 3-E in the Fire Plan).
7. Hauling and loading of construction material, and trash decked at approved landings or main staging area.
8. Roads: Dust abatement or rock aggregate installation. (Does not include pit development.)



RED FLAG WARNING

If a Red Flag Warning is issued (despite the PAL Level) All work will cease and be suspended until the warning is cancelled and the Forest Service approves a resumption of the project. On a Red Flag Warning, ONLY the following work may be done without authorization:

1. Rock runs along highway for rocks and other debris.
2. Clearance and hauling of slide and debris material along highway or cleared turnout. Material can be transported to cleared and approved disposal site. (NO PIONEERING)
3. Maintenance of cleared berms and turnouts.
4. Guardrail repair with hand tools only.
5. Emergency down tree or slide removal in an uncleared area of vegetation requires an approved 300 gallon water truck and operator on scene. (See Section 3-D in the Fire Plan.
6. Equipment at approved sites may be serviced.

What is a Red Flag Warning?

Red Flag Warning is a term used by fire weather forecasters and fire agencies to call attention to limited conditions of particular importance that may result in extreme burning conditions. The Warning is issued when there is an ongoing event or the fire weather forecaster has a high degree of confidence that Red Flag criteria will occur within 24 hours of issuance. Red Flag criteria occurs whenever a geographical area has been in a dry spell for a week or two or for a shorter period if before Spring greenup or after Fall color, and the National Fire Danger Rating System (NFDRS) is high to extreme and the following forecast weather parameters are forecasted to be met.

- A sustained wind speed average of 15 MPH or greater.
- Relative humidity less than or equal to 25 percent.
- Temperature of greater than 75 degrees.

During periods of Red Flag Warning or when the Angeles National Forest is in EXTREME fire danger, all smoking is confined to enclosed vehicles or inside buildings.

PROJECT ACTIVITY LEVEL LOCATIONS

On the following page is a list of locations on the Angeles National Forest and the Project Activity Level (PAL) that relates to that area (PAL Area). Reference is made to the left hand column to locate the project or maintenance area. The middle column refers to the boundaries' of the project area with regard to the PAL while the right column (PAL Area) designates the weather station name.

Example: If a project or maintenance is planned for Glendora Mountain Road, the Location points are from the City of Glendora to the East Fork. The PAL Area or weather station is Tanbark. On the PAL Hotline, the Project Activity Level for Tanbark will be given that will cover the proposed project / maintenance area predicted for the following day.

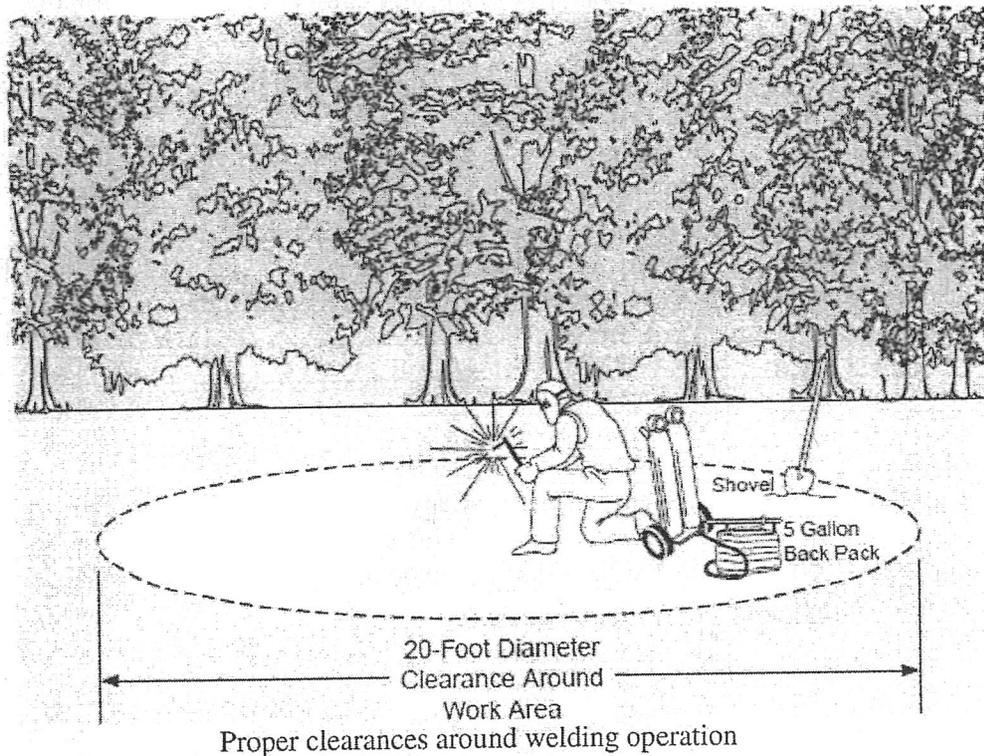
LISTEN ON THE PAL HOTLINE NUMBER FOR THE PROJECT ACTIVITY LEVEL FOR THE APPROPRIATE AREA SHOWN BELOW IN FOLLOWING TABLE.

HIGHWAY	LOCATION POINTS	PAL AREA
Golden State Highway 99	All Forest Service Lands	Whitaker Peak
Templin Highway	All Forest Service Lands	Whitaker Peak
Smokey Bear Road	All Forest Service Lands	Whitaker Peak
Interstate 5	Forest Boundary to Hwy 138 Intersection	Whitaker Peak
Pine Canyon Road	All Forest Service Lands	Grass Mountain
Elizabeth Lake Road	Lake Hughes Road to Elizabeth Lake	Grass Mountain
Lake Hughes Road	Forest Boundary to Elizabeth Lake Rd.	Warm Springs
San Francisquito Road	Forest Boundary to Elizabeth lake	Warm Springs
Bouquet Canyon Road	All Forest Service Lands	Warm Springs
Spunky Canyon Road	All Forest Service Lands	Warm Springs
Sierra Highway	Forest Service Lands only to Rower Flat	Warm Springs
Angeles Forest Highway	Forest Boundary to Big Tujunga Cyn Road	Mill Creek
Angeles Forest Highway	Big Tujunga Canyon Road to Clear Creek	Clear Creek
Sand Canyon Road	Forest Boundary to Bear Divide	Camp 9
Placerita Canyon Road	All Forest Service Lands	Camp 9
Soledad Canyon Road	All Forest Service Lands	Camp 9
Aliso Canyon Road	All Forest Service Lands	Acton
Mt. Emma Road	All Forest Service Lands	Valyermo
Big Rock Creek Road	All Forest Service Lands	Valyermo
Big Pines Highway	Valyermo to Forest Boundary	Valyermo
Largo Vista Road	All Forest Service Lands	Valyermo
Big Pines Highway	Forest Boundary to Angeles Crest Hwy 2	Big Pines
Table Mountain Road	All Forest Service Lands	Big Pines
Angeles Crest Highway 2	Forest Boundary (La Canada) to Red Box	Clear Creek
Angeles Crest Highway 2	Red Box to Buckhorn	Chilao
Angeles Crest Highway 2	Buckhorn to Forest Boundary(Wrightwood)	Big Pines
Mt. Wilson Road	Red Box to Skyline Park	Clear Creek
Upper Big Tujunga Road	Angeles Forest Highway to Angeles Crest Hwy.	Mill Creek
Little Tujunga Road	All Forest Service Lands	Little Tujunga
Big Tujunga Cyn Road	Forest Boundary to Angeles Forest Highway	Little Tujunga
Goldcreek Road	All Forest Service Lands	Little Tujunga
Lopez Canyon Road	All Forest Service Lands	Little Tujunga
Chantry Flats Road	All Forest Service Lands	Henninger Flats
Chaney Trail Road	All Forest Service Lands	Henninger Flats
Mt. Baldy Road	Forest Boundary to Tunnels	Claremont
Mt. Baldy Road	Tunnels to Icehouse Canyon	Tanbark
Mt. Baldy Road	Icehouse Canyon to Ski Area	Big Pines
Glendora Ridge Road	Mt. Baldy to Horse Canyon Saddle	Tanbark
Glendora Mountain Road	Glendora to East Fork	Tanbark
East Fork Road	East Fork Bridge at Hwy 39 to East Fork RS.	Tanbark
Highway 39	Azusa to Coldbrook	Tanbark
Highway 39	Coldbrook to Crystal Lake / Roads End	Big Pines
Crystal lake Road	Hwy 39 Junction to Roads End in Campground	Big Pines
Shoemaker Road	East Fork San Gabriel Canyon	Tanbark

Metal Cutting, Welding and Grinding

A California Inter-agency Burning Permit is required for all metal cutting, metal grinding and welding operations. This permit may be obtained from the Forest Service. Permits expire at the end of the calendar year. Welding and grinding have caused numerous wildfires in California. The guidelines and graphic below illustrates the fire safe practices designed to help mitigate fire starts caused by sparks, slag, or hot metal falling into dry vegetation.

1. Clear and maintain vegetation to bare soil a minimum of 10 feet from work site.
2. Have at least one shovel at the work site.
3. Have a pressured water fire extinguisher (preferred) at the site or a 5 gallon water back pack. A 10 lb. dry chemical fire extinguisher may also be used.
4. Have 2 adults in attendance at all times. One person working and the other observing potential fire hazards.
5. Where practicable use a welding tent or shield to contain welding and grinding sparks.



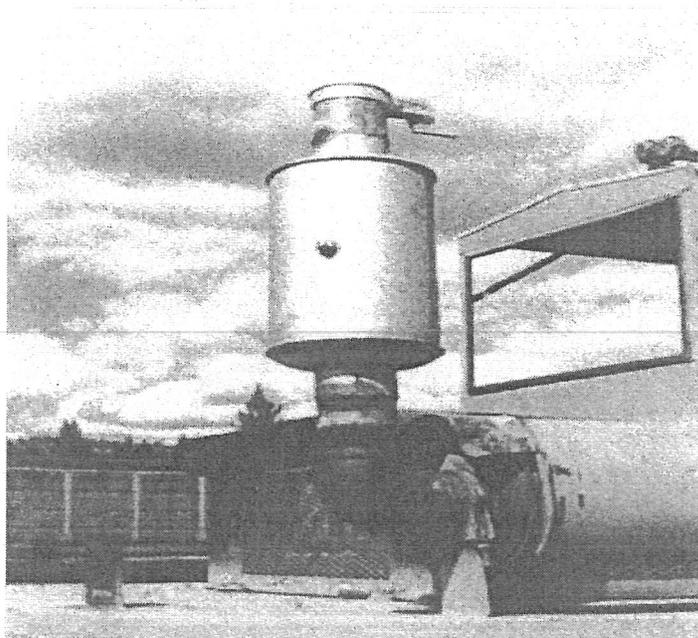
EXHAUST SYSTEMS AND SPARK ARRESTERS

Vehicle exhaust systems start fires in two ways: (a) an emission of hot carbon particles and (b) direct contact with flammable materials and vegetation. Contact with flammable materials may occur by a collection of debris on manifolds and inside heat shields or by parking where vegetation may come into close proximity or contact with exhaust systems and other components. Fire ignition by direct contact most often occurs with a vehicle muffler, catalytic converter, or exhaust pipe. Operating temperatures of any of these components are well above the ignition temperatures of dry wildland fuels. Vehicles should always be parked on an area cleared of flammable vegetation.

All internal combustion engines operating on forest or grass / brush covered lands in California are required to be equipped with an effective USDA Forest Service approved spark arrester. Trucks buses and passenger vehicles equipped with a muffler are exempt from this requirement provided they are legally registered for highway travel and the exhaust system has not been modified.

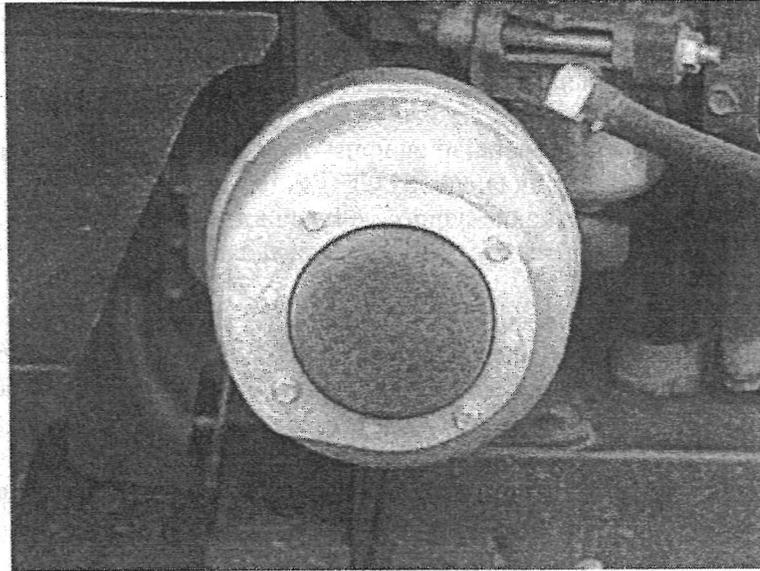
Heavy equipment such as road graders, front end loaders, and caterpillar tractors that are diesel powered and are equipped with a turbo charger where 100% of the exhaust is recycled through the turbo charger are exempt from the spark arrester requirement. All portable gasoline generators, chainsaws, and weed eaters are required to have a spark arrester on the exhaust system. Chain saws should be checked periodically to ensure that the spark arrester is in place and is not damaged.

Retention spark arrester mounted on tractor exhaust



Spark Arresters Continued

Photo below shows an attrition type spark arrester that is used on small gasoline engines and portable generators. The screen is stainless steel and .023 in size.



The Angeles National Forest Paved Road Maintenance Fire Plan will be reviewed annually and updated as needed. Updated and reviewed August 2012.

Reviewed by: Eddie Childs 8/15/2012
Eddie Childs Date
Fire Prevention Officer
Angeles National Forest

Reviewed by: Sonia Bergdahl 8/15/2012
Sonia Bergdahl Date
Forest Engineer
Angeles National Forest

Reviewed by: James D. Hall 8/15/2012
James Hall Date
Fire Management Officer
Angeles National Forest

Approved by: Marty Dumpis 08/15/2012
Marty Dumpis Date
Acting Forest Supervisor
Angeles National Forest



United States
Department of
Agriculture

Forest
Service

Los Angeles River
Ranger District

12371 N. Little Tujunga Cyn. RD
San Fernando, CA 91342
818-899-1900 Voice
626-447-8992 TTY

File Code: 2700

Date: June 19, 2014

Agustin Barajas
Associate Environmental Planner
State of California DOT, Division of Environmental
Planning
100 South Main Street, Suite 100
Los Angeles, CA 90012-3712

Dear Mr. Barajas:

Thank you for your email application of June 16, 2014. The proposed work involves sand sealing the existing pavement on SR-2. An emulsion is sprayed on the surface followed by sand to create an improved surface. This project is taking place to appease the cycling community after the last chip seal treatment created a rough surface for cyclists. Sometime between now and September, the sand seal treatment will be completed at three locations along SR-2; only post mile 34.0 lies within the Angeles National Forest. If the treatment proves to be successful, the entire project area from LaCanada to Wrightwood will receive the sand seal treatment in 2015. All work would occur in the travel lanes only. No work would occur on vehicle turn outs.

This sand sealing project, which is within the Angeles National Forest, is authorized by the operation and maintenance provisions of the SR-2 Special Use Permits in place. Please review the attached Fire Plan and Project Activity Levels for Paved Road Servicing and Maintenance. If you have any questions please do not hesitate to contact me or Graham Breakwell at email: grahambreakwell@fs.fed.us.

Sincerely,

MICHAEL J. MCINTYRE
District Ranger



