# 1. INTRODUCTION

Public Resources Code (PRC) Section 4291 – "Clearance Around Structures" states:

> *"Any person that owns, leases, controls, operates, or maintains any building or structure in, upon, or adjoining any mountainous area of forest-covered lands, brush-covered lands, or grass-covered lands, or any land which is covered with flammable material, shall at all times do all the following:*
>
> *(a) Maintain around and adjacent to such building or structure, a fire break made by removing and clearing away, for a distance of not less than 30 feet on each side thereof or to the property line, whichever is nearer, all flammable vegetation or other combustible growth. This subdivision does not apply to single specimens of trees, ornamental shrubbery, or similar plants which are used as ground cover, if they do not form a means of rapidly transmitting fire from the native growth to any building or structure.*
> *(b) Maintain around and adjacent to any such building or structure, additional fire protection or fire break made by removing all brush, flammable vegetation, or combustible growth which is located from 30 feet to 100 feet from such building or structure or to the property line, whichever is nearer, as may be required by the director if he finds that, because of extra hazardous conditions, a fuel break of only 30 feet from such building or structure is not sufficient to provide reasonable fire and life safety. Grass and other vegetation located more than 30 feet and less than 18 inches in height above the ground may be maintained where necessary to stabilize the soil and prevent erosion.*
> *(c) Remove that portion of any tree which extends within 10 feet of the outlet of any chimney or stovepipe.*
> *(d) Maintain any tree adjacent to or overhanging any building free of dead or dying wood.*
> *(e) Maintain the roof of any structure free of leaves, needles, or other dead vegetative growth.*
> *(f) Provide and maintain at all times a screen over the outlet of every chimney or stovepipe that is attached to any fireplace, stove, or other device that burns any solid or liquid fuel. The screen shall be constructed of nonflammable material with openings of not more than one-half inch in size.*
> *(g) The director may adopt regulations exempting structures with exteriors constructed entirely of nonflammable materials, or conditioned upon the contents and composition of same, he may vary the requirements respecting the removing or clearing away of flammable vegetation or other combustible growth with respect to the area surrounding said structures.*
>
> *No such exemption or variance shall apply unless and until the occupant thereof, files with the department, in such form as the director shall prescribe a written consent to the inspection of the interior and contents of such structure to ascertain whether the provisions hereof and the regulations adopted hereunder are complied with at all times."*

This law was enacted to prevent fire that originates in structures or on premises to spread into forested areas. It was also created to minimize the chances of a forest fire entering into populated areas and destroying improved property and endangering human life. The history of damaging fires has shown the most devastating danger is the risk of fire originating in the wildland and transmitting itself into improved areas. Most statutory hazard reduction requirements and other hazard reduction measures are based upon this concept. However, the risk of wildfire originating on or about structures and their premises is great, and also causes historically damaging fires. The statutory hazard reduction requirements, and other hazard and risk measures, also mitigate the occurrence of structure and premise wildfire ignitions. PRC 4291 does not apply to a specific jurisdiction, but does apply to specific fuel conditions which are identified in the opening paragraph.

# 2. PROPERTY FIRE PREVENTION INSPECTIONS

## 2.1 Fire Prevention Inspections

The goal of the fire prevention program is to educate homeowners of measures to prevent the ignition and spread of unwanted human-caused fires. Emphasis should be placed on loss reduction and prevention of large and damaging fires and to provide firefighter safety. One of the necessary tools utilized to accomplish this goal is the **structural fire prevention** inspection. Inspections are a fire prevention engineering activity. Coordinated with other ignition management activities, the inspections are aimed at eliminating or reducing fire hazards and risks by changing the environment through removing or reducing the heat source, modifying or reducing the fuels, and modifying the act or omission, allowing the heat source to contact the ignitable fuels.

## 2.2 Authority

Authority for California's fire protection agencies to enforce state forest and fire laws is contained in **PRC 4119**. Agency personnel may inspect all properties, except the interior of dwellings, subject to the state forest and fire laws, for the purpose of ascertaining compliance with such laws. USFS personnel that are allowed to do routine inspections for the reduction of fire hazards around buildings as described under PRC 4291 must be designed, in writing, by the Director of CDF. This designation allows certain Forest Service employees to act as an authorized agent for CDF to do routine fire inspections as specified in the Four-Party Cooperative Fire Protection Agreement. If a violation of state law is found, Forest Service employees should contact their local CDF office and Forest Service Law Enforcement Officer.

## 2.3 Guidelines

Success depends on all personnel, including fire prevention, fire control, and resource management staff. All contacts should be handled so citizens will understand and participate in fire prevention efforts. Citizen participation will lead to reductions in total wildfire costs and losses. To the extent resources are available, local inspection programs should concentrate on areas that have the greatest potential for large and damaging fires with the accompanying loss of life and property.

All personnel involved in inspection activities should have a badge, name plate, and the proper shoulder patch to facilitate proper identification. Unit fire prevention plans should contain local inspection policy and procedures, including minimum training requirements for fire prevention inspectors.

All inspections conducted for the purpose of ascertaining compliance with state forest and fire laws will be recorded on the Interagency Fire Hazard Inspection Notice (LE-38a [USFS R5-5100-209] – **Appendix B**) to provide for: uniform law enforcement, a record for timely follow-up, public education, standardized written notice, and documentation of inspection activity level for program effectiveness and direction.

## 2.4 Liability

If fire law violations are observed, or significant hazards or risks are evident, the violations should be recorded on an appropriate inspection form. Corrective information, such as handout material, should be provided to the occupant to facilitate correction and compliance.

The occupants should understand that they are responsible for any fire that escapes their control or property. Explain that if a fire should start on their property, because of certain hazards, and spread to a neighbor's property, the neighbor may have civil recourse for damages through the courts. In addition, the wildland fire agency may recover suppression costs and the occupants may face criminal charges.

### 2.5 Interior Structure Inspection

CDF, USFS, and BLM may not inspect the interior of a structure unless specifically authorized under PRC 4291. Local fire agencies may have the authority and should be encouraged to inspect single-family structure interiors upon request.

### 2.6 Mechanical Equipment

If mechanical equipment is present, follow the suggested inspection procedures and state law requirements found in the Interagency ***"Industrial Operations Fire Prevention Field Guide."***

# 3. INSPECTOR QUALIFICATIONS

Below are some qualities of a good fire prevention inspector. Of primary importance is personal appearance. The inspector should:

- ✓ Be neat.
- ✓ Be in proper uniform.
- ✓ Be well mannered.
- ✓ Be dependable.
- ✓ Have the ability to spot unusual or dangerous conditions, and foresee the creation of dangerous situations.
- ✓ Be able to size-up people quickly and correctly.
- ✓ Have personal initiative, be able to plan assignments and carry out work without direct supervision.
- ✓ Have a keen interest in the job and a sense of responsibility toward the public.
- ✓ Possess self-confidence - be firm, fair and friendly.
- ✓ Be alert to new ideas.
- ✓ Become familiar with agency policies.
- ✓ Be tactful in pointing out hazards and criticizing situations.
- ✓ Have the fortitude and perseverance to see the job through.
- ✓ Know the forest and fire laws thoroughly**.**
- ✓ Know the inspection area.

Inspectors must keep three things in mind. They:

1. Must use their abilities to size-up conditions or operations where a probable fire may result from hazards and risks coming together.
2. Are reducing fire occurrence by obtaining compliance with the law.
3. Are providing a valuable service to the public by informing and educating them in techniques to protect themselves and their property from wildland fires.

## 3.1 Tools of the Inspector

Below are tools and materials that will help the inspector do a thorough inspection.

- ❑ A map of the area to be inspected; with all known buildings identified.
- ❑ Inspection forms and notebook. Notes should be taken of observed hazards and risks during tour of inspection. Sketches, photos, or maps may also be an aid to future inspections or firefighting operations.
- ❑ Red Tags, spark arrester stickers, and other notification systems.
- ❑ Flashlight – which may assist in checking for certain hazards.
- ❑ Spark Arrester Guide.
- ❑ Copy of applicable laws and ordinances.
- ❑ Camera – Photographs of violations where compliance is not expected are desirable both for possible legal action and for information and education purposes.
- ❑ Prior records where previous inspections have been made should be studied before additional inspections are made.
- ❑ Measuring tape to determine adequate clearances, etc.

All inspections should end with providing the homeowner with a handout relating to firewise practices for future reference.

## 4. INSPECTOR TRAINING

Unit fire prevention plans should list the minimum training required for new fire inspectors. The minimums for inspectors conducting property inspections in the state responsibility area (SRA) should include at least:

1. Orientation
   a. Property Inspection Guide
   b. Local/regional/agency policy

2. Minimum Qualifications
   a. Local requirements

3. Forest and Fire Laws
   a. Excerpts from State and Federal Laws (**Appendix C**)
   b. Detailed instruction on clearance requirements

4. Local Regulations
   a. Air Pollution Control District (APCD) references
   b. Unit burn permit requirements
   c. Weed abatement ordinances

5. Fuel Management Techniques for Homeowners
   a. Available educational handouts for distribution.

6. Property Inspections
   a. Defensible Space Concept
   b. Fuel Management for Homeowners
   c. Access for Emergency Equipment
   d. Vegetation Management
   e. Firewise Construction
   f. Fire Sources
   g. Emergency Preparedness

7. Documenting the Inspection
   a. Legal requirement
   b. State, regional, local requirements
   c. Interagency Fire Hazard Inspection Notice (LE 38a – **Appendix B**)

8. Follow-Up Inspections

# 5. PRE-INSPECTION PROGRAM

A pre-inspection program can improve compliance, foster good public relations with homeowners, reduce law enforcement action and reduce overall staffing and cost requirements. Pre-inspection activities include media notification of potential inspectees, mail-out information, homeowner self-inspection mail-outs and homeowner confirmation of compliance with codes. Consider the following:

- Time of year (emphasize usually during spring months).
- Large numbers of absentee ownership, i.e., summer homes.
- Limited availability of staff, including fire crews.
- Adds emphasis to high and critical fire hazard severity areas.

## 5.1 Advance Notice

Advance notice (letters/postcards and media messages) used in combination with inspections produces the most effective results for the amount of time and work invested. The advance notice (letter/postcard) should contain the following:

- The necessity of fire hazard reduction.
- Notice that the department will be contacting the property holder to make a fire prevention inspection and the approximate date.
- What the inspection will consist of.
- The measures necessary for the owner to complete in order to adequately reduce the fire hazards. This can be keyed to an enclosed Fire Law Excerpts pamphlet or other attachment.
- Agency contact, address and phone number for more information.

# 6. CONDUCTING THE INSPECTION

## 6.1 The Inspection Procedure

The inspection for clearance around structures requires the use of some special techniques. However, there are also basic techniques that can be used for most statutory fire prevention inspections.

## 6.2 Time of Day

The time of day that premise inspections are conducted will vary with the type of premises. Any time after 8:00 a.m. may be fine for inspections of business establishments or recreational camp inspections. Inspection of dwellings, both permanent and seasonal, usually requires the inspection to be made after 10:00 a.m. If inspections are conducted before this time, the inspector may encounter some resistance or ill feeling especially by summer homeowners who usually like to sleep late. The same will apply to rural-dwelling occupants on weekends.

## 6.3 Approaching the Property

When driving onto the property to be inspected, give attention to the general surrounding of the buildings and their exposures to other buildings. Also, observe the general construction, type, occupancy, and general condition of the buildings. These observations will be of assistance during the inspection and will be of value should a fire occur or threaten the property.

Approach:
- Drive up slowly.
- Leave gates as found.
- Avoid raising dust.

For Personal Safety:
- Note threatening signs.
- Evidence of dogs.
- Evidence of illegal activity.

Observe:
- The grade/condition of the **road** and **accessibility** of approach from the standpoint of hazard reduction and fire protection.
- The general surroundings of buildings and exposures to other structures and vegetation.
- The structures, mechanical equipment, etc., in relation to their use and exposure to hazardous fuels.

## 6.4 Initial Contact with Occupant

The inspector's first duty is to make contact with the property owner, or whoever is in charge of the premises. The inspector should:

- Inspector should be in official vehicle and uniform.
- Introduce him/herself and show identification.

- Establish communications, avoiding technical or slang language.
- Explain the purpose of the contact and present the idea that the inspection will help protect the property from wildfire.
- Create the idea you are there to help.
- Rather than immediately jumping into a discussion of fire prevention, try a few "icebreakers." This will put the contact on a friendlier basis.
- Obtain permission to inspect. Request that someone accompany the inspector. If permission to inspect is refused, withdraw as cordially as possible and immediately notify your supervisor.
- Offer to return at a later date if the present time is not appropriate or causes inconvenience.
- If resident is uncooperative, leave the property and notify your supervisor.

### 6.5 Understanding Fire Behavior

Provide the homeowner with a brief understanding of fire behavior. There are three factors that influence the way fire behaves:

**Fuel**

- How much fuel is around the home?
- Vegetation dead or alive is fuel, as is the house and deck.
- Trees and home – heavy fuels burn longer.
- Grass and shrubs – light/flashy.

**Topography**

- Fire travels fast when it is climbing a hill.
- Saddles in a ridge act like a chimney. Homes built here will take a wildfire full force directed at the homeowner's front door.

**Wind**

- Wind provides fire with more oxygen making flames more intense.
- In a firestorm, flames are so intense the fire makes its own wind.
- Burning embers will be carried in the wind and can easily land on the homeowner's property or roof.