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# Standard Operating Procedure for Starting a Campfire CF-001, Release 3

SOP Scope: CA State Parks
Functional Group: CA State Parks
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#### 1. PURPOSE

This Standard Operating Procedure (SOP) instructs a campsite user to safely build a campfire.

#### 2. SCOPE

This SOP is applicable to recreational campfires within California State Park Campgrounds. This SOP is not intended for tangentially related fires such as beach bonfires, wilderness survival fires, and cooking fires.

#### 3. RESPONSIBILITY

- 3.1 Campground Users are responsible for:
  - 3.1.1 Sourcing this SOP from CA State Parks
  - 3.1.2 Procuring material and equipment
  - 3.1.3 Lighting and fueling a campfire
  - 3.1.4 Supervising the flame and surrounding area
  - 3.1.5 Extinguishing the firepit when ceasing recreation
  - 3.1.6 Contacting Park Staff and emergency services if needed
  - 3.1.7 Cleaning and vacating the campsite when finished
- 3.2 California State Parks is responsible for:
  - 3.2.1 Selling firewood to campsite users
  - 3.2.2 Managing campground lots
  - 3.2.3 Enforcing campground rules and regulations
  - 3.2.4 Keeping log reports of campsite reservations, exits, and firewood sales
  - 3.2.5 Managing emergency situations and contacting further emergency services if needed

## 4. ASSOCIATED FORMS

- 4.1 Campground firewood and campsite check-in receipt
- 4.2 Flint and Steel Fire Striker Instruction Set

## 5. DEFINITIONS

- 5.1 Tinder: Easily combustible material needed to start a flame. Examples include leaves, bark, fluff, pine needles, and sawdust.
- 5.2 Kindling: Readily flammable material used to grow a flame. Examples include twigs, branches, pinecones, and fatwood.
- 5.3 Fatwood: Resin-soaked wood found within a tree. Highly flammable example of kindling.
- 5.4 Tinder Fungus: Various species of wood bark growing mushroom. Flammable when dry.
- 5.5 Spark: A luminous hot particle. Created from striking flint with steel.
- 5.6 Carbon Monoxide (CO): Colorless, odorless, and poisonous gas formed by incomplete combustion of carbon. Replaces Oxygen (O2) within the lungs.
- 5.7 Gatehouse: A shack used by campground staff to collect entry fees for vehicles as well as keep log of campground reservations.



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#### 6. REFERENCES

6.1 Flint and Steel Fire Striker Instruction Set

#### 7. SAFETY

- 7.1 Carbon Monoxide is a byproduct of the burning of firewood. Users should keep a comfortable distance from the burning fire and avoid inhaling within a smoke cloud.
- 7.2 A bucket of water is needed to put the fire/embers out. Do not leave a firepit unsupervised, even if there is no active flame. Embers have potential to reignite new material.
- 7.3 Lighter fluid is highly flammable and a potential fire safety hazard. Squirt the fluid bottle from at least 3 feet away to ensure safe distance. Do not store the lighter fluid container near an open fire.
  - 7.3.1 If an accidental ignition of a lighter fluid container occurs keep a distance of at least 12 feet until the subsequent fire shrinks. Use a fire extinguisher to disable the accidental fire.
- 7.4 A fire extinguisher is crucial in putting out a spreading fire. If the fire is uncontrollable by fire extinguisher: save yourself and escape the reach of the flames.
- 7.5 In case of emergency, contact 911 if possible and notify Park staff immediately.

## 8. MATERIALS AND EQUIPMENT

- 8.1 Materials
  - 8.1.1 Logs 1 bundle
  - 8.1.2 Tinder 1 or 2 handfuls
  - 8.1.3 Kindling A generous armful
  - 8.1.4 Lighter fluid 1 container
- 8.2 Equipment
  - 8.2.1 A copy of this SOP
  - 8.2.2 Flint and Steel
  - 8.2.3 A Bucket of water
  - 8.2.4 A Fire extinguisher
  - 8.2.5 A Firepit

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## 9. MAIN BODY OF SOP — CAMPFIRE STARTING PROCEDURE

- 9.1 Check in and purchase
  - 9.1.1 Check into the campground with CA State Park staff at the gatehouse.
    - 9.1.1.1 Campground staff can provide a copy of this SOP upon request.
  - 9.1.2 A check-in receipt will be provided: tape it to your vehicle.
  - 9.1.3 Campground staff will log the user's first and last name and campsite number.
  - 9.1.4 Inquire with staff regarding the purchasing of on-site Firewood.
  - 9.1.5 Purchase firewood from the campground or bring your own.
  - 9.1.6 Park your vehicle at the campsite's parking spot.
- 9.2 Campfire setup
  - 9.2.1 Set up the campsite and ready the equipment and materials for fire-starting.
    - 9.2.1.1 Readiness entails a clear firepit, accessible materials, and a focused user.
  - 9.2.2 Utilize the metal firepit provided within the campsite. Do not start a fire outside a firepit.
  - 9.2.3 See section 7 for important safety information if you have not already.
  - 9.2.4 Place individual logs against each other to form a conical tepee-like shape.
  - 9.2.5 Pack the standing tepee with flammable tinder such as leaves and pine needles.
  - 9.2.6 If you were provided with a receipt for firewood, you may use it as tinder.
  - 9.2.7 Place kindling amongst the logs of the tepee to support the structure.
    - 9.2.7.1 This should protect the middle of the tepee from wind and increase internal temperature.
  - 9.2.8 See the Safety section for guidelines on lighter fluid use if unfamiliar.
  - 9.2.9 Apply a 3-5 second squirt of lighter fluid to the log teepee to ensure efficient saturation.
- 9.3 Campfire lighting
  - 9.3.1 Form a bundle of flammable material out of tinder, such as cotton, pine fluff, or sawdust.
  - 9.3.2 Repeatedly strike the flint with steel onto a bundle of tinder to spark a flame.
  - 9.3.3 Refer to the instructions provided with your flint and steel, if necessary.
  - 9.3.4 Once a flame is sustained, lightly blow onto it to keep it oxygenated.
  - 9.3.5 If the flame is blown out, utilize the flint and steel again to restart the process.
  - 9.3.6 Transfer the flame to the kindling at the base of the constructed tepee.
  - 9.3.7 The teepee should catch and sustain the flame from the tinder bundle.
  - 9.3.8 If the flame is not catching or is fading, re-apply a 3 second squirt of lighter fluid to the logs.9.3.8.1 Lighter fluid is a highly flammable liquid. Exercise caution when applying to a flame.
  - 9.3.9 After the fire has grown by at least 50% fuel the fire with additional logs.
  - 9.3.10 Carbon Monoxide may be expelled from the top of the smokestack.



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- 9.3.11 Avoid prolonged exposure to smoke clouds. See section 7 for more information.
- 9.4 Campfire cessation and campground clean-up.
  - 9.4.1 Utilize a bucket of water to smother the flame/embers once the campfire is no longer needed.
    - 9.4.1.1 An unsupervised flame can cause a wildfire, do not leave an active firepit.
    - 9.4.1.2 Utilize a fire extinguisher in case of a fire emergency.
    - 9.4.1.3 If the fire grows to unsafe levels: save yourself, vacate the area, and contact emergency services.
  - 9.4.2 Retire to a sleeping area such as a tent or vehicle.
  - 9.4.3 Clean and vacate the campsite when your stay is expired.
  - 9.4.4 Campground staff will:
    - 9.4.4.1 Ensure the campsite and firepit are serviceable for the next guest.
    - 9.4.4.2 Update the campground logbook of the exodus of the campsite user.



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## 10. DOCUMENTATION

- 10.1 CA State Park employees must
  - 10.1.1 Keep log of guest's first and last name and campsite number
  - 10.1.2 Record firewood sales with customer first and last names in a ledger
  - 10.1.3 Physically ensure cleanliness of the camp-lot and firepit
- 10.2 Campground Users are not required to fill out any documentation beyond a campground reservation.

#### 11. HISTORY

Release No.	Effective Date	Reason/Justification for Change
1	10/21/24	First draft.
2	11/13/24	Second draft with updates to safety and procedures.
3	11/19/24	Altered sections 1, 3, 4, 7, 8, 9, and 10 with content improvements.
4	«effective_date»	New

#### 12. ATTACHMENTS

N/A