

## Preventing and Mitigating Fires While Performing PG&E Work

### SUMMARY

This utility standard establishes precautions for PG&E employees and contract partners to follow when traveling to, performing work, or operating outdoors on or near any forest-, brush-, or grass-covered lands. This includes any location that has vegetation that can sustain combustion permitting the spread of fire.

The information in the standard supplements the instructions in local, state, and federal fire regulations and permits. If a local or state fire regulation or permit contains provisions more stringent than those in this document, the more stringent provisions **must** be followed.

SAFE-1503WBT, *Fire Danger Precautions*, targets work personnel working on or near any forest-, brush-, or grass-covered lands. This training for the target audience is mandatory, generally to be completed annually between January 1 and April 1.

For more information on how to navigate the required mitigations outlined in this standard, refer to Utility Procedure [EMER-4102P-01, Applying EMER-4102S Work Activities Procedure](#).

### TARGET AUDIENCE

All PG&E employees and contract partners performing PG&E work that may result in a spark, fire, or flame on or near any forest-, brush-, or grass-covered lands.

PG&E's workforce, including our contract partners, are defined as "work personnel" throughout the standard.

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## Preventing and Mitigating Fires While Performing PG&E Work

### REQUIREMENTS

#### 1 Safety

- 1.1 Performing utility work on or near any forest-, brush-, or grass-covered lands presents a danger of fire, in addition to the hazards inherent to utility work.
- 1.2 Following the directives in this standard is essential to preventing and mitigating fire danger and protecting the environment, the utility system, work personnel, and the public.
- 1.3 Perform all operations or actions within hazardous fire areas in accordance with [SAFE-1001S, "PG&E Injury & Illness Prevention Plan \(IIPP\)."](#) and the [Code of Safe Practices](#).

#### 2 General Requirements

- 2.1 When performing work that could produce a spark, fire, or flame on or near any forest-covered land, brush-covered land, or grass-covered land, within 25 feet of any flammable material, follow the requirements laid out in this section, **regardless** of the daily [Utility Fire Potential Index \(FPI\) Forecast](#).
- 2.2 During R1–R2 conditions, **AND when vegetation cannot sustain** combustion permitting the spread of a fire due to snow, rain, dense fog, or wet vegetation, the requirements of this standard do not apply.
- 2.3 The work supervisor/local superintendent and managers must ensure that the following actions are taken:
  - Identify and comply with the local, state, and federal fire authority permits and/or restrictions in the area where the work is to be performed, including Federal Energy Regulatory Commission (FERC) project requirements.
  - When operating on Federal land, PG&E must follow the [Federal Project Activity Level \(PAL\)](#) requirements which outline fire protection measures and activity restrictions based on fire risk. Predicted PAL ratings can be located on the [7-Day PAL Outlook](#) or by contacting USFS [Region 5 Forest & Grassland Offices](#).
  - Follow the guidelines of [Appendix F, Operations and Maintenance Plan for Electric Facilities on National Forest System Lands within the Pacific Southwest Region](#).
- 2.4 Any person in charge (PIC) of work must follow locally changing meteorological conditions, as well as be aware of the possibility of increased fire danger during the time work is in progress.
- 2.5 When fire suppression tools and extinguishers are required, they must be immediately available in the area from which a spark, fire, or flame may originate.
- 2.6 Red Flag Warnings require the use of the R5 Fire Mitigations outlined in [EMER-4102P-01-Att01, Wildfire Mitigation Matrix](#).

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- 2.7 While intraday updates are rare to FPIs they may occur if the fire danger conditions, or other circumstances warrant the update from Meteorology and Fire Science. Subscribe [here](#) to receive the daily FPI email alerts.

### APPLYING EMER-4102S TO PERFORMING WORK ACTIVITIES

- 2.8 **Before starting work** on or near any forest-, brush-, or grass-covered lands, you must fully read and understand this standard (EMER-4102S). A simple 4-step method has been developed to apply this standard; see [EMER-4102P-01, Applying EMER-4102S Work Activities Procedure](#), for details.
1. DETERMINE the [Fire Index Area \(FIA\)](#) in which you are working.
  2. DETERMINE the [Fire Potential Index \(FPI\)](#) rating for the day.
  3. IDENTIFY the work activity being performed on [EMER-4102P-01-Att01, Wildfire Mitigation Matrix](#) and implement the required mitigations outlined in the matrix.
  4. COMPLETE the [Wildfire Risk Assessment](#).
- 2.9 A Wildfire Prevention and Mitigation mobile field application is available for PG&E issued devices. Field crews are strongly encouraged to utilize this application that contains numerous automated features including:
- FIA and FPI based on user-entered work location (lat / long).
  - Required fire mitigations for specified work activity.
  - Required type and quantity of firefighting tools based on crew size.
  - Incombustible and emergency work exemptions.
  - Completion and electronic retention of required wildfire risk assessment.
- 2.10 Where the Wildfire Prevention and Mitigation mobile field application is unavailable (e.g., when the network is down or the application is inaccessible), the previously used paper format must be used as the backup method.
- 2.11 Quick reference guides (QRGs) are available in the Technical Information Library (TIL) for:
- [App Installation Guide](#)
  - [App QRG](#)
  - [App Dashboard QRG](#)

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### 3 Mitigations

- 3.1 The mitigations outlined in this standard are minimum requirements. Implement additional mitigations if the PIC deems them necessary.
- 3.2 When the FPI rating is R1, R2, or R3, work personnel must follow the requirements set forth in [Section 2, "General Requirements"](#) when performing work on or near any forest-, brush-, or grass-covered lands.
- 3.3 In preparation of R4 and R5 conditions, work personnel must always consider additional vegetative fuel modifications before starting work.
  1. Modifications include the following methods:
    - Mowing
    - Masticating
    - Disking
    - Wetting down the vegetation in the area
  2. Any vegetative fuel modifications that result in ground disturbing activity must have the appropriate environmental review.
    - Consult the project's Environmental Release to Construction (ERTC) (included in the Job Construction package) to confirm if the proposed mitigation is approved.
  3. Additional mitigations for R4 through R5-Plus conditions are noted in [EMER-4102P-01-Att01, Wildfire Mitigation Matrix](#). Review all work activity requirements in the matrix before starting work.
- 3.4 When the FPI rating is R4, work personnel must take the following mitigations in addition to the mitigations listed in [Section 2](#), unless otherwise noted in [EMER-4102P-01-Att01, Wildfire Mitigation Matrix](#).
  1. Ensure the trailer-mounted water tank, water tender, or other water-delivery/fire-suppression system can reach the immediate location where the spark, fire, or flame may occur.
  2. Ensure all water delivery systems meet the 120-gallon water requirement with not less than 200 feet of hose, not less than 1 inch in diameter, and a pump or water pressure capable of applying a minimum of 40 pounds per square inch (psi) at the nozzle, while in the open position.
  3. Evaluate weather conditions throughout the day to ensure that it remains safe to work, and to confirm that mitigations are appropriate based on the FPI rating.

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4. Assign a **Working** Fire Watch to monitor for fire at the jobsite while performing normal work duties.
    - The Working Fire Watch must remain at the jobsite for 30 minutes after work ends.
  - 3.5 When the FPI rating is R5 or R5-Plus, work personnel must take one or more of the following mitigations, in addition to the mitigations previously listed, unless otherwise noted in [EMER-4102P-01-Att01, Wildfire Mitigation Matrix](#).
    1. Ensure that there is a **Dedicated** Fire Watch at the jobsite while performing normal work duties.
      - The Dedicated Fire Watch must remain on the jobsite for at least 30 minutes after work ends.
    2. Evaluate weather conditions throughout the day to ensure that it remains safe to work.
    3. Ensure trailer-mounted water tanks, water tenders, or other water-delivery/fire-suppression systems can reach the immediate location where the spark, fire, or flame may occur.
      - When the trailer-mounted water tank or other water-delivery device leaves the jobsite to refill, work personnel must stop work until it returns.
    4. **Suspend all planned work during R5-Plus conditions**, as defined in [EMER-4102P-01-Att01, Wildfire Mitigation Matrix](#).
    5. For any **emergency work** performed in R5-Plus conditions, work personnel **must ensure that one of the following safety measures is in place**:
      - A 300-gallon, trailer-mounted water tank, water tender, or other water delivery/fire suppression device **must** remain at the jobsite AND **must** be dedicated to fire suppression.

**OR**

      - A Safety and Infrastructure Protection Team (SIPT) **must** be at the jobsite on standby while the work is performed,
- ### 4 Vehicle and Helicopter Landing Zone Operations
- 4.1 When traveling to the jobsite, or when operating on unimproved roadways, all work personnel must take the following actions:
    1. **Do not drive** off unimproved roadways except when performing required work, or during an emergency. An unimproved roadway is any surface where ground litter and vegetation will sustain combustion permitting the spread of fire.

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2. All vehicles must have one dry chemical fire extinguisher (rated “ABC – multi-purpose use”) in good working order. Supplement the fire extinguisher with the following tools, as required below:
  - a. Passenger vehicles:
    - One round point shovel
  - b. Trucks (1/2 ton or larger) and all-terrain vehicles (ATVs):
    - One round point shovel
    - One 5-gallon backpack pump-type fire extinguisher
  - c. Heavy machinery or equipment (e.g., tractors, tub grinders, whole tree chippers, excavators, bulldozers):
    - One round point shovel.
    - One 5-gallon backpack pump-type fire extinguisher must be in the operating area but not required to be affixed to heavy machinery or equipment.
  - d. Compressed Air Foam Systems (CAFS) may be used as a supplemental extinguishing agent. However, CAFS cannot be a substitute for a 5-gallon backpack pump-type fire extinguisher.
3. While driving off, or parking off, improved roadways maintain situational awareness. Look for potential ignitions that could occur when driving or parked in the vicinity of dry brush, grass, or other vegetation.
4. Whenever possible park vehicles in an area cleared of vegetation (e.g., paved, gravel or cleared to bare mineral soil).
  - a. IF unable to park in a cleared area,  
  
THEN take the following steps:
    - (1) Park on vegetation that has been mowed or cut to a maximum height of 4 inches.
    - (2) Park in such a manner that the tailpipe is not within 36 inches of any standing vegetation.
    - (3) Use a Working Fire Watch until the vehicle exhaust system has cooled, and there is no chance of an ignition.
    - (4) Ensure that the proper fire extinguishing tools are easily accessible.

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- (5) Consider wetting down the parking area.
  5. Turn off the motors of unoccupied vehicles when parked off road unless the vehicle and motor need to remain running for work purposes. Maintain situational awareness for potential ignitions.
  6. When **idling**, the vehicle **must** be parked on a cleared area defined as paved or gravel, or on dirt cleared down to bare mineral soil.
    - a. IF idling and unable to park in a cleared area,  
THEN take the following steps:
      - (1) Park on vegetation that has been mowed or cut to a maximum height of 4 inches.
      - (2) Park in such a manner that the tailpipe is not within 36 inches of any standing vegetation.
      - (3) Use a Working Fire Watch while the vehicle is idling.
      - (4) Ensure that the proper fire extinguishing tools are easily accessible.
      - (5) Wet down the area under the vehicle before beginning work, and as needed, to prevent an ignition.
  7. When operating a vehicle with a Diesel Particulate Filter (DPF) system, **always** park on a paved, gravel or bare mineral soil surface, or where vegetation has been mowed or cut to a maximum height of 4 inches. The exhaust system remains extremely hot before, during, and after the regeneration process. An ignition can occur even while the vehicle is off.
- 4.2 When traveling to a landing zone (LZ) all work personnel must take the actions identified in 4.1.
1. All work personnel must take the following actions when constructing an LZ on an unimproved site:
    - Mow or cut vegetation to a maximum height of 4 inches. After cutting to a maximum height of 4 inches, wet down the LZ area for dust mitigation in a diameter consistent to the type and size of helicopter being used per Table 4, in [AVI-3001M, Helicopter Operations Field Manual](#).
    - If unable to mow the vegetation to 4-inches maximum height, use a water delivery system (water tender, water buffalo, etc.) to thoroughly matte down and wet the vegetation in a diameter consistent to the type and size of helicopter being used per Table 4, in [AVI-3001M, Helicopter Operations Field Manual](#).



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Remember to refill the water delivery system so that at least 120 gallons of water are available prior to beginning PG&E work.

- Additional LZ construction information can be found in chapter 4 of [AVI-3001M, Helicopter Operations Field Manual](#).

### 5 Firefighting Tools and Equipment

5.1 To ensure quick response to an ignition, firefighting tools and equipment must be at the immediate work location and readily accessible.

1. Water Delivery Systems (i.e., Water Buffalos, Water Tender)
  - a. It is recommended to always have a water delivery system on a jobsite.
  - b. At the beginning of the day, before starting work, start and test the water delivery system to ensure it is in good working order.
  - c. When required, the water delivery system must be able to reach the immediate location where the spark, fire, or flame may occur.
    - All water delivery systems must meet the 120-gallon water requirement with not less than 200 feet of hose, not less than 1 inch in diameter, and a pump or water pressure capable of applying a minimum of 40 pounds per square inch (psi) at the nozzle, while in the open position.
    - The hose on the water delivery system must be capable of reaching the immediate jobsite.
    - As part of the tailboard, a person must be assigned to start the pump, if needed.
  - d. Position water delivery system and all other vehicles and equipment to ensure safe egress in the event the crew must evacuate the location quickly. Park vehicles facing the evacuation route.
  - e. At no time will any work personnel be asked to fight any fire beyond their experience or training.
  - f. IF the conditions do not allow water supply access to the worksite,  
  
THEN take the following actions:
    - (1) Consider adding additional hose to extend the reach of water delivery system.



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- (2) When there is a one- or two-person crew, there must be a minimum of one 5-gallon backpack pump-type fire extinguisher and round point shovel at the jobsite.
  - (3) When the number of workers exceeds two, have a minimum of three 5-gallon backpack pump-type fire extinguishers and enough firefighting hand tools so that each employee at the operation can be equipped to fight fire. Stage the firefighting hand tools as close to the immediate worksite as practical.
2. Fire Extinguishers
    - a. All vehicles must have a dry chemical fire extinguisher (rated ABC).
    - b. Use dry chemical fire extinguishers (rated ABC) for flammable liquids, vehicle, or equipment fires.
    - c. Use backpack pumps and other water-based extinguishers for controlling vegetation fires. Dry chemical fire extinguishers have limited effectiveness on vegetation fires.
  3. Sealed Box Firefighting Tools
    - a. Sealed box firefighting tools must meet Public Resources Code (PRC) 4428 requirements and must be used for firefighting purposes only.
    - b. All Vegetation Management (VM) Program operations on or near any forest-, brush-, or grass-covered lands must have a sealed box of firefighting tools. VM operations must also have all necessary permits, including, but not limited to, Utility Right of Way Exemption or Timberland Conversion Permits.
    - c. All other functional areas (FAs) are required to have a sealed box of tools **only** during major work operations.
      - A major work operation is defined as a multi-day or multi-week work activity that has an equipment and/or vehicle staging area, and multiple crews coming and going during the course of work. This may include a reconductoring job, transmission pipeline repairs, hydro operation of repairing dams or levees, etc.
    - d. The sealed box of tools must be located, within the operating area, at a point accessible in the event of a fire. The sealed box of tools must contain the following items:
      - One backpack pump type fire extinguisher filled with water.
      - Two axes.

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- Two McLeod fire tools.
- Enough shovels so that each work personnel at the operation can be equipped to fight fire.
- One or more serviceable chainsaw(s) of 3½ or more horsepower, with a cutting bar 20 inches in length or longer shall be immediately available within the operating area. This tool does not have to be in the sealed box but must be within the operating area.

### 6 Pre-Work Readiness

6.1 When working at the jobsite, all work personnel **must** perform the following actions:

1. While performing stationary ground level jobs or activities from which a spark, fire, or flame may originate (e.g., welding, cutting, grinding), OR when using portable tools powered by an internal combustion engine (portable generators, air compressors, welders, not to include portable powersaws) remove all flammable material (e.g., grass, leaf litter, including snags) down to mineral soil, for a minimum of 10 feet around the jobsite.

a. IF the ground cannot be sufficiently cleared due to environmental reasons (i.e., riparian zones, sensitive plants, and animals) or erosion concerns, OR IF the work is being performed above ground level (i.e., installation and removal of master grounds on a de-energized transmission line adjacent to an energized transmission line),

THEN perform the following actions:

(1) Wet down the area around such operation for a minimum of 10 feet and assure to maintain wet conditions for duration of work.

**OR**

(2) Cover the flammable vegetation, including snags, with fire blankets, for a minimum of 10 feet around the area.

**AND**

(3) IF the FPI rating is R1, R2, or R3,

THEN assign a Working Fire Watch at the jobsite.

(4) IF the FPI rating is R4,

THEN assign a Working Fire Watch at the jobsite, equipped with at least 120 gallons of water, with at least 200 feet of hose, not less than 1 inch in diameter, and a minimum of 40 psi at the nozzle, while in the open position.

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- (5) IF the FPI rating is R5,

THEN assign a Dedicated Fire Watch, equipped with at least 120 gallons of water, with at least 200 feet of hose, not less than 1 inch in diameter, and a minimum of 40 psi at the nozzle, while in the open position.

### 7 Electric Operations Requirements

- 7.1 Electric operations organizations should consider performing work de-energized.
- 7.2 For already scheduled and future work scheduling, an environmental assessment of the wildfire risk must be conducted and documented.
- IF the wildfire risk for causing an ignition is too great,  
THEN consider performing the work de-energized.
- 7.3 If overhead work is being performed energized in areas of forests-, brush-, and grass-covered lands and the FPI rating is R4 or R5, fuels must be cleared to bare mineral soil in a 15-foot radius and the area within a 50-foot radius below the facility must be wet down prior to beginning work.
- 7.4 A dedicated fire watch is required when performing work on energized overhead equipment under R4 and R5 FPI ratings.

### TRANSMISSION LINE SWITCHING REQUIREMENTS

- 7.5 Line switches on 60kV, 70kV, and 115kV lines in Tier 2/3 High Fire Threat District (HFTD) and High Fire Risk Area (HFRA) at ALL FPI Ratings for scheduled, forced and emergency work (including line relay events) should be OPERATED in a **de-energized state**. (Refer to [TD-1400P-07-Att02, Transmission Line Switching, Non-Reclose and EPSS](#), for additional details.)

### EPSS SWITCHING REQUIREMENTS

- 7.6 To reduce the risk of ignition during planned switching on Enhanced Power Safety Settings (EPSS) circuits that requires the disablement of EPSS settings, a Safety and Infrastructure Protection Team (SIPT) crew is required for the duration of the disablement to extinguish any unexpected ignition, if one were to occur. (Refer to [TD-1400P-07-Att02-B002, Wildfire Operational Mitigations for Planned Switching](#), for additional details.)

### REPLACING FUSES

- 7.7 Before starting to replace fuses, work personnel must ensure that the following are true:

1. The overhead (OH) line is successfully patrolled, and hazards are cleared.
2. Conditions at the base of the pole do not support ignition or the rapid spread of fire in the event of arcing or sparking.

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### OVERHEAD PATROL REQUIREMENTS

- 7.8 Follow electric distribution and transmission overhead patrol requirements.
- Refer to [Utility Procedure TD-1470P-01, Enhanced Powerline Safety Setting \(EPSS\) Enablement Criteria](#), for information about patrolling and preventing automatic testing in [Fire Index Areas](#) with fire ratings of R4 and above.

### 8 Reporting Ignitions on the Jobsite

- 8.1 When reporting an ignition on the jobsite, refer to [EMER-4102P-02, Jobsite Ignition Reporting](#). This procedure does not supersede and is not a substitute for the [RISK-6306S, Fire Incident Data Collection Plan and Reporting Standard](#), which requires PG&E to annually report all fire ignitions associated with its electric facilities that meet the criteria specified by the CPUC.

### 9 Smoking

- 9.1 Smoking (including, but not limited to, cigarettes, cigars, vape pens, etc.) is allowed only when the FPI rating is R1, R2, or R3 AND the following mitigations haven't been taken:
1. There is a designated smoking location (cleared down to mineral soil) at the jobsite with a 3-foot radius.
  2. There is a means to extinguish any potential ignition.
  3. There is a water-filled or sand-filled receptacle (e.g., a metal bucket) to extinguish cigarettes, cigars, etc.
  4. DO NOT smoke when the utility FPI ratings are R4, R5, or R5-Plus.

### 10 Quality Reviews

- 10.1 Each organization must have a method to verify work personnel adherence to the requirements of this standard and its attachments.
1. The Predictive Solutions SafetyNet Safety Observation Program is an enterprise-wide program that allows leaders to interact with personnel to reinforce positive safety behaviors and increase safety awareness.
  2. Organizations should use SafetyNet to conduct EMER-4102S quality reviews.
  3. Inspectors should use SafetyNet while performing fire mitigation outlined in this standard.
    - a. Use the **Wildfire Mitigation** observation card in SafetyNet to perform fire risk mitigation observations.
    - b. Engage in dialogue with PG&E employees on best practices and gaps.

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- 10.2 The regional field safety organizations perform regular, documented safety observations to identify safe and at-risk behaviors, provide immediate guidance and recommendations on how to control/mitigate potential risks, and share best practices identified during the observations with our work personnel.
- 10.3 The document owner of this standard performs enterprise-level trend analysis and develops plans to communicate best practices and address identified gaps with the respective FAs.

### END of Requirements

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### DEFINITIONS

**Dedicated Fire Watch:** A crew member whose **only** assigned job responsibility is to stand by at a jobsite to watch for possible or new fire ignitions while work is being performed. This person should have complete situational awareness, help to extinguish fires quickly, and stop work, when needed, due to safety.

**Disking:** Using a disc-shaped tool to till soil for vegetation removal.

**Fire Index Area (FIA):** A geographical area over which fire danger determinations are produced.

**Fire Potential Index (FPI) Rating:** A rating to determine the risk of fire and its likely behavior. Its calculation and scale from R1 to R5-Plus considers fuel moisture, humidity, wind speed, air temperature, and historical fire occurrence. These ratings are as follows:

- **R1:** Very little or no fire danger.
- **R2:** Moderate fire danger.
- **R3:** Fire danger is so high that care must be taken using fire-starting equipment. Local conditions may limit the use of machinery and equipment to certain hours of the day.
- **R4:** Fire danger is critical. Using equipment and open flames is limited to specific areas and times.
- **R5:** Fire danger is so critical that the use of some equipment and open flames is not permitted.
- **R5-Plus:** The greatest level of fire danger where rapidly moving, catastrophic wildfires are possible. This is, typically, when fire danger is extreme; “plus,” there are high-risk weather triggers (e.g., strong winds). PSPS triggering event is an example.

**Fire Tools:** The tools used to fight fires. Fire tools include the following equipment:

- **Shovel:** A standard, round point shovel, with an overall length of not less than 46 inches.
- **McLeod:** A hand tool used for raking and scraping.
- **Pulaski:** An axe-like fire hand tool used for cutting, chopping, or grubbing.
- **Axe:** A hand tool used for cutting and chopping.
- **Backpack pump:** A portable 5-gallon water pack with a hose and nozzle used to extinguish fires (e.g., collapsible backpacks, plastic or steel tanks).

**Fire Weather Watch:** A type of forecast issued by the National Weather Service to alert fire officials and firefighters of potentially dangerous fire weather conditions in the next 24 to 36 hours.

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**High Fire Threat Districts (HFTD):** Areas adopted by the California Public Utilities Commission (CPUC) with elevated or extreme wildfire risk and in proximity to communities at risk.

**High Fire Risk Area (HFRA):** A purpose-built map for use in scoping Public Safety Power Shutoff events identifying areas where risk factors for the potential of catastrophic fire from utility infrastructure ignition during offshore wind events is higher.

**Improved Roadway:** Paved, concrete, graveled, and/or maintained dirt roads used by work personnel. These roadways are void of all ground litter and vegetation that may sustain combustion permitting the spread of fire.

**Major Work Operations:** A multiday or multiweek work activity that has an equipment and / or vehicle staging area, and multiple crews coming and going during the course of work. This may include a reconductoring job, transmission pipeline repairs, hydro operation of repairing dams or levees, etc.

**Masticating:** Mechanically reducing vegetation into small chunks to assist in removing small trees (e.g., snags).

**Overland Travel:** Areas that are overgrown with grass and/or brush without a visible road.

**Public Safety Power Shutoff:** Mitigate the risk of utility infrastructure contributing to catastrophic wildfire risk by proactively de-energizing PG&E facilities in the event of severe weather.

**Red Flag Warning:** A warning issued by the National Weather Service to alert fire officials and firefighters of potentially dangerous and imminent fire weather conditions.

**Safety and Infrastructure Protection Team (SIPT):** This in-house team consists of two-person crews composed of IBEW-represented PG&E employees who are trained and certified safety infrastructure protection specialists. They provide standby protection and asset protection services in support of crews and protect critical utility infrastructure within PG&E's service territory, especially in areas at higher risk of wildfire.

**Sealed Box of Tools:** The sealed box of tools required on every vegetation management work activity; major work operations for all other FAs must be located within the operating area and must be reserved for firefighting purposes only. The box that contains the tools can be made of any material or can be in a single compartment on a vehicle, as long as the box can be closed, and it is understood that the tools must not be used for routine work. The box is not required to be locked, in accordance with California Public Resource Code.

**Stationary Work:** Work being performed in a single location for an extended period of time that is neither intended nor expected to move.



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**Unimproved Roadways:** Roadways without pavement, gravel, or other surfacing where ground litter and vegetation may sustain combustion permitting the spread of fire. (Ref PRC 4428.)

**Working Fire Watch:** A crew member who, **in addition to** normally assigned work duties, is responsible for fire detection, risk mitigation, and total situational awareness while the work is being performed. This crew member is also responsible for stopping work, when required, due to safety hazards AND for helping extinguish fires.

### IMPLEMENTATION RESPONSIBILITIES

The Vice President, Emergency Preparedness and Response, is responsible for approving and distributing this standard.

Functional Area Leaders responsible for field and operational teams within the following organizations must ensure that their PG&E employees and contract partners, whose actions could result in igniting a fire, are aware of and comply with this standard (this includes the accompanying attachments, procedures, job aids, and the annually required SAFE-1503WBT training):

- Electric Operations
- Gas Operations
- Power Generation
- Information Technology
- Customer Care
- Shared Services
- Vegetation Management
- Contract Construction
- General Construction
- System Inspections
- Other groups not mentioned above who travel to, perform work, or operate outdoors on or near any forest-, brush-, or grass-covered land.

### GOVERNING DOCUMENT

[EMER-02, Fire Prevention and Mitigation Policy](#)

### COMPLIANCE REQUIREMENT / REGULATORY COMMITMENT

[California Department of Forestry and Fire Protection \(CAL FIRE\)](#)

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[California Health & Safety Code](#)

[California Public Resources Code – Division 4, “Forests, Forestry and Range and Forage Lands \[4001 - 4958\],” Part 2, “Protection of Forest, Range and Forage Lands \[4101 - 4789.7\],” Chapter 6, “Prohibited Activities \[4411 - 4446\],” Article 2, “Prohibited Activities \[4421 - 4446\]”](#)

[United States Forest Service](#)

### Records and Information Management

PG&E records are company assets that must be managed with integrity to ensure authenticity and reliability. Each functional area (FA) must manage records and information in accordance with the Enterprise Records and Information Management (ERIM) policy, standards, and Enterprise Records Retention Schedule (ERRS). Each FA is also responsible for ensuring records are complete, accurate, verifiable, and can be retrieved upon request. Refer to [GOV-7101S, “Enterprise Records and Information Management Standard,”](#) for further records management guidance or contact ERIM at [Enterprise\\_RIM@pge.com](mailto:Enterprise_RIM@pge.com).

## REFERENCE DOCUMENTS

### Developmental References

[CAL FIRE: Wildfire Prevention Engineering Field Guides](#) (click “Power Line Fire Prevention Field Guide” to select the most current field guide)

[National Wildfire Coordinating Group \(NWCG\)](#)

[Numbered Document 015225, “Cutouts, Fuses, and Disconnects for Overhead Distribution Lines”](#)

[United States Department of Agriculture \(USDA\) – Forest Service, Cibola National Forest and National Grasslands: National Fire Danger Rating System](#)

[California Health & Safety Code Division 12, Fires and Fire Protection](#)

[California Public Resources Code – Division 4, “Forests, Forestry and Range and Forage Lands \[4001 - 4958\],” Part 2, “Protection of Forest, Range and Forage Lands \[4101 - 4789.7\],” Chapter 6, “Prohibited Activities \[4411 - 4446\],” Article 2, “Prohibited Activities \[4421 - 4446\]”](#)

[USDA – Forest Service Federal Project Activity Level \(PAL\)](#)

[SAFE-1013S, \*Welding, Cutting Safety Standard\*](#)

## Preventing and Mitigating Fires While Performing PG&E Work

### Supplemental References

[AVI-3001M, Helicopter Operations Field Manual](#)

[EMER-4102P-01, Applying EMER-4102S Work Activities Procedure](#)

[EMER-4102P-02 Jobsite Ignition Reporting Procedure \(formerly TD-1464S-JA03\)](#)

[EMER-4102P-01-Att01, Wildfire Mitigation Matrix \(formerly TD-1464S-Att01\)](#)

[TD-1400P-07-Att02, Transmission Line Switching, Non-Reclose and EPSS](#)

[TD-1470P-01, "Enhanced Powerline Safety Setting \(EPSS\) Enablement Criteria,"](#)

[TD-4640P-01, Hot Work Control – Fire Prevention](#)

[RISK-6306S, Fire Incident Data](#)

[SAFE-1001S, PG&E Injury & Illness Prevention Plan \(IIPP\)](#)

[Code of Safe Practices](#)

[Fire Index Areas](#)

[PG&E GIS Department](#)

[Utility Fire Potential Index \(FPI\) Forecast](#)

[PAL Rating Appendix F, Operations and Maintenance Plan for Electric Facilities on National Forest System Lands within the Pacific Southwest Region](#)

### APPENDICES

NA

### ATTACHMENTS

NA

### DOCUMENT REVISION

TD-1464S, *Preventing and Mitigating Fires While Performing PG&E Work*, Rev. 8, 12/16/2022

TD-1464S-Att01, *Wildfire Mitigation Matrix*, Rev 6, 12/16/2022

TD-1464S-Att02, *Wildfire Risk Checklist*, Rev 5, 12/16/2022

TD-1464S-JA01, *Four Step Navigation*, Rev 0, 08/11/2022

TD-1464S-JA02, *Daily FPI Subscription*, Rev 0, 08/02/2022

TD-1464S-JA03, *Calling 911 to Report Ignitions*, Rev 0, 12/16/2022

## Preventing and Mitigating Fires While Performing PG&E Work

TD-1464S-JA03, *Translation ES – US*

TD-1464S-B004, Transmission Line Switching in Tiers 2 / 3 HFTD and HFRA

### DOCUMENT APPROVER

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### REVISION NOTES

Where?	What Changed?
	Changes from TD-1464S (Rev 8)
Throughout	General grammar edits for clarity; references to TD-1464 Job Aids and attachments changed to EMER-4102 procedures, job aids, and attachments
Throughout	Changed LOB to FA (Functional Area)
2.1	Added reference to 25 feet of flammable material
2.3	Added third bullet about guidelines in Appendix F
2.7	Added reference to Fire Science
2.8	Moved details to new procedure, see EMER-4102P-01
2.9	New information
2.10	New information
2.11	New information
3.4 #1	Divided paragraph, now #1 and #2 (#3 renumbered as #4)
4	Added “Helicopter Landing Zone” to header
4.2	New information
5.1 #1 c	Updated text; expanded text in first bullet

## Preventing and Mitigating Fires While Performing PG&E Work

Where?	What Changed?
5.1 #3 c	Divided paragraph and created bullet
6.1 #1 a (4) and (5)	Added reference to “open position”
7.5	Per Bulletin B004, Added reference to TD-1400P-07-Att02
7.6	Per Bulletin TD-1400P-070Att02-B002, Added SIPT standby
8.1	Created new procedure with details, see EMER-4102P-02
Implementation Responsibilities	Updated second paragraph; updated bullet list
Governing Document	Added reference to Policy, EMER-02
Developmental and Supplemental References	Updated lists
Document Recission	Added list of rescinded documents

### 2024-06546 Document Routing Request

**Created on:** 2/13/2024 4:10:49 PM **Status:** EDR request approved.  
**Requestor:** [REDACTED] **Department:** Emergency Preparedness & Response-ET  
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Documents		Reviewers/Approvers	
<b>Title</b>	<b>Version</b>	Modify Reviewers/Approvers	
EMER-4102S PrevMitFiresPreWkStd(Rev0).docx	Original	<b>Reviewers</b>	
Consolidate Files		Approved on 2/14/2024 4:42:40 PM	
		<b>Approvers</b>	
		Gibson, Angelina   Approved on 2/22/2024 12:09:47 AM	
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