

Kentucky Prescribed Fire Council
Administrative Policy
For
Kentucky Certified Burn Bosses
And
Kentucky Prescribed Fire Crew Members
January 2019

# Kentucky Prescribed Fire Council (KPFC)

#### KRS 149.175

149.175 Exemption from chapter's requirements for persons certified by the Kentucky Prescribed Fire Council's Burn Boss Program -- Exceptions.

(1) The Division of Forestry may exempt any person certified by the Kentucky Prescribed Fire Council's Burn Boss Program from the requirements of this chapter, except that fires set under this section shall be in accordance with KRS 149.375 and shall not be conducted under a local burn ban or under a red flag warning day as determined by the National Weather Service.

(2) Persons exempted under this section who set prescribed fires shall give notification of the burn to the Division of Forestry at least twenty-four (24) hours prior to the burn, and notify adjacent landowners and local emergency dispatch the day of the burn. Effective: July 15, 2016 History: Created 2016 Ky. Acts ch. 30, sec. 1, effective July 15, 2016

## **Administrative Policy**

#### **Definitions:**

Apprentice Burn Boss (ABB): An individual having completed the Kentucky Certified Burn Boss Workshop and all required pre-requisite training and experience requirements currently seeking required post workshop experience by acting as burn boss. Apprentice Burn Bosses are supervised by a Kentucky Certified Burn Boss who is on site and who has full responsibility over the controlled burn operation.

<u>Apprentice Burn</u>: A prescribed burn conducted under the supervision of a qualified Kentucky Burn Boss by an ABB who has completed the Kentucky Certified Burn Boss Workshop. To qualify as an apprentice burn you must perform at least 7 out of the 10 tasks from the Apprentice Task Sheet.

<u>Apprentice Task Sheet</u>: The method of documenting necessary tasks completed by an Apprentice Burn Boss prior to becoming a Kentucky Certified Burn Boss.

<u>Burn Boss Identification Number</u>: A unique number assigned to all Kentucky Certified Burn Bosses and used during the notification process to the Kentucky Division of Forestry.

<u>Kentucky Certified Burn Boss (KCBB)</u>: An individual meeting the requirements of KPFC Certified Burn Boss program including training/experience requirements and having received a burn boss identification number from the Kentucky Division of Forestry. KCBB may be exempt from 149.400 by Kentucky Division of Forestry.

<u>Kentucky Certified Burn Boss Workshop</u>: A training developed by KPFC required for Kentucky Burn Boss Certification through KPFC allowing for approved exemption from KRS 149.400.

**<u>Kentucky Controlled Burn Workshop</u>**: A training developed by KPFC for meeting minimum qualifications for KPCM.

<u>Kentucky Prescribed Fire Crew Member (PFCM)</u>: An individual who successfully completes KPFC minimum standards and is engaged in the practice of controlled burning through the act of, but not limited to: holding, firing, implementation, planning and contingency activities under the supervision of a Kentucky Certified Burn Boss.

**Kentucky Prescribed Fire Council (KPFC)**: A non-profit 501(c)(3) organization whose mission is to promote the understanding and enhance collaboration for the use of ecologically based prescribed fire within the Commonwealth of Kentucky.

Prescribed Burn Plan: A written plan that includes primary elements as required by KPFC.

<u>Prescribed Fire</u>: A controlled burn applied to a forest, brush, or grassland vegetative fuels under specified environmental conditions and precautions which cause the fire to be confined to a predetermined area and allow accomplishment of the planned land management objectives. For purposes of this administrative policy, prescribed burn and controlled burn are uses interchangeably.

<u>Prescribed Fire Portal</u>: A database where KCBB are required to enter details from completed burns: <a href="http://app.fw.ky.gov/firecouncil/">http://app.fw.ky.gov/firecouncil/</a>

**National Wildfire Coordination Group (NWCG)**: A collection of federal, state, and non-profit entities charged with standardizing wildland fire qualifications of national standards.

<u>Notification</u>: A required action taken by a KCBB when serving as a KCBB. Notifications must include KDF, with 24 hours prior to the burn. With adjacent landowners and local emergency dispatch notifications the day of the burn. The notification system is outlined in Appendix B.

**Red Flag Warning**: A forecast warning issued by the United States National Weather Service signifying potential for hazardous fire weather conditions. No controlled burns may be implemented during a Red Flag Warning.

**County Burn Ban**: A county specific ban on outdoor burning due to drought conditions. No controlled burn may be implement during a county burn ban.

**KRS 149.400**: Kentucky Revised Statue that defines Kentucky's fire hazard seasons, fires prohibited, and exemptions.

- 1. **Kentucky Prescribed Burn Crew Member** that would be working under a Kentucky Certified Burn Boss under KRS 149.175 exemption.
  - A) Kentucky Prescribed Burn Crew Member must meet one of the following training:
  - Successful Completion of the Kentucky Controlled Burn Workshop

OR

- NWCG S-130 Firefighter Training
- NWCG S-190 Introduction to Wildland Fire Behavior
- NWCG I-100 Introduction to Incident Command System (verified by National Wildfire Coordinating Group (NWCG) certificates)

## B) Recommended (but not required) Training:

NWCG RT-130 Annual Fireline Refresher

#### C) Physical Fitness

Each entity will be responsible for its own physical fitness requirement

## D) <u>Kentucky Controlled Burn Workshop (Topics Covered Below)</u>:

- weather
- > fire behavior
- > tools
- > fuels
- firebreaks
- burn planning
- emissions / smoke
- safety and PPE
- suppression

- ignition
- laws/notifications

#### 2. Kentucky Certified Burn Boss

#### A) Kentucky Certified Burn Boss Requirements:

- Must be 18 years of age or older.
- Must not have been convicted of violation from Kentucky Division of Forestry within the previous three (3) years.
- Adhere to KRS 149.175 see notification procedure in Appending B.
- > Shall not conduct a prescribed burn during a burn ban or red flag warning.
- > Shall have proof of certification on person while burning.
- Shall record prescribed burns into Kentucky's prescribed fire portal.

#### **B) Kentucky Certified Burn Boss Revocation:**

- ➤ The Kentucky Division of Forestry shall retain the right to revoke KRS 149.175 exemption status if KPFC and KDF deems negligence or if KDF has issued violation to a KCCB. Revocation or suspension actions go as follows but not limited to:
  - Suspension for 1 year if a burn resulted in a KDF Violation.

## C) Kentucky Certified Burn Boss must meet one off the following standards

- NWCG RXB3, RXB2, or RXB1 qualification
- > TNC Workshop on Ecological Burning (including course prerequisites)
- Kentucky Certified Burn Boss Workshop (including course and experience prerequisites) and required post-workshop experience documented on the Apprentice Task Sheet.
- Meet KPFC grandfathering criteria below:
  - This "grandfathering" process approved by KPFC vote on March 2, 2018 applies to existing agency/organization Burn Bosses (agencies having exemption prior to HB 208):
  - Must meet KPFC Kentucky Certified Burn Boss Prerequisites:
    - o S-130 (with L-180)
    - o S-190
    - o I-100
    - o Participation on 5 prescribed burns or wildfires
    - Successfully led 3 burns
    - Develop 1 prescribed burn plan
  - Agency/organization is responsible for creating their list of Burn Bosses to submit to KPFC.
     Agency/organization's designated representative signs "affidavit" verifying that their list of Burn Bosses meets requirements above.
  - Deadline to submit list of Burn Bosses is December 31, 2018

### D) Training and experience prerequisites for individuals admitted to the KCBB Workshop:

- NWCG S-130 (with L-180)
- ➤ NWCG S-190
- ➤ NWCG I-100
- Participation on 5 prescribed burns or wildfires.

## E) Kentucky Certified Burn Boss Workshop curriculum must include:

- weather
- fire behavior
- > fuels
- firebreaks
- burn planning and burn plans
- burn implementation
- emissions / smoke
- safety
- > suppression
- > ignition
- laws/notifications/liability
- live burn exercise (or sand tables if raining)
- objectives from the NWCG Firefighter Type I (S-131)
- objectives from the former NWCG Look Up, Look Down, Look Around (S-133)

## F) Post Workshop Experience:

After completing the workshop, candidates must apprentice to a qualified burn boss on 3 burns (must meet mentoring entities physical fitness requirement). An Apprentice Burn is defined as a prescribed burn conducted under the supervision of a qualified Kentucky Burn Boss by an ABB who has completed the Kentucky Certified Burn Boss Workshop. To qualify as an apprentice burn you must perform at least 7 out of the 10 tasks from the Apprentice Task Sheet.

#### G) Recommended (but not required) Courses:

- S-234 Ignitions Operations
- S-290 Intermediate Wildland Fire Behavior
- > S-390 Introduction to Wildland Fire Behavior Calculations
- > RX-310 Introduction to Fire Effects
- RX-301 Prescribed Fire Implementation
- RX-341 Prescribed Fire Burn Plan Preparation
- > RX-410 Smoke Management
- > RT-130 Annual Fireline Refresher

#### H) Physical Fitness:

- Each entity is responsible for its own physical fitness requirement, if any.
- 3. The KPFC recommends the Kentucky Controlled Burn Workshop for private landowners burning on their own land under KRS 149.400 (after 6pm).
  - A) The <u>Kentucky Controlled Burn Workshop</u> is the same workshop that is required for a Kentucky Prescribed Burn Crew Member.

# 4. Minimum standard for Prescribed Burn Plans for KPFC Certified Burn Bosses (Appendix A Example)

A) <u>Complexity Analysis</u>: Each entity should utilize a complexity analysis or risk assessment to be developed for each burn. <a href="https://www.nwcg.gov/sites/default/files/products/pms424.pdf">https://www.nwcg.gov/sites/default/files/products/pms424.pdf</a>

## B) <u>Prescribed Burn Plan – Minimum Required Elements</u>:

- Signature Page
- Geographic Location
- Sources of Emergency Assistance
- Burn Unit Description
- Goals and Objectives
- > Fuel and Weather Prescription
- > Fire Behavior
- Smoke Management
- > Burn Organization
- Equipment
- Managing the Burn
- Safety and Medical Information
- Post Burn Activities
- Maps
- Burn Day Checklist
- Crew Briefing Checklist

## C) Kentucky Prescribed Fire Plan:

All Kentucky Certified Burn Bosses will, at minimum, include these elements within their prescribed burn plans.

#### ■ <u>Element 1</u> – Signature Page (Include Information Below)

- Burn Unit Name
- Date and Signature of the Prescribed Fire Plan Preparer
- Date and Signature of the Prescribed Burn Boss (this may or may not be the same as the Prescribed Fire Plan Preparer

#### ■ Element 2 – Geographic Location

 Describe the physical features of the prescribed burn unit including a narrative description of the location of the prescribed burn, including a legal description (latitude & longitude) and county.

#### ■ Element 3 – Sources of Emergency Assistance

o Include phone numbers of local suppression response agency. Also, consider contacts for fire, law enforcement, and medical assistance.

#### Element 4 – Burn Unit Description

 Include project boundaries, topography, and size of prescribed burn unit. Describe vegetation type and fuel models within and adjacent to prescribed burn unit. List any special features, issues, and constraints within the burn unit (i.e. fences to protect, T&E species, habitat, or etc.).

## ■ Element 5 – Goals and Objectives

Describe goals and objectives for prescribed burn unit

#### ■ Element 6 – Fuel and Weather Prescriptions

- Define a range of fuel and weather conditions during which the prescribed fire may be ignited and held. List recommended minimums and maximums for the following:
  - ✓ Temperature
  - ✓ Relative Humidity (RH)
  - ✓ Surface Winds
  - ✓ Transport Winds
  - ✓ Number of Days Since Precipitation

#### ■ Element 7 – Fire Behavior

 Describe the desired fire behavior necessary to meet the specific objectives of the prescribed burn

## ■ Element 8 – Smoke Management

- Identify smoke sensitive areas in a radius appropriate for burn unit size and fuel type including: roads, airports, hospitals, Class I air sheds, and etc. Also, include desired wind direction necessary for mitigating sensitive areas.
- List required burn permits and/or notifications for burns in or adjacent to nonattainment areas.

#### <u>Element 9</u> – Burn Organization

Specify the minimum number of people required for implementation and control of the prescribed burn. List skills desired for the organization. List actual burn crew names on the day of burn.

## ■ Element 10 – Equipment

 Specify the minimum number and type of equipment required for implementation and control of the prescribed burn.

## Element 11 – Managing the Burn (Include the information below)

- Fire Break Preparation
- Ignition Plan
- Holding Plan
- Back up sources of water
- o Communications
- Mop Up Standards
- Public Relations
- Notifications
- Legal Considerations
- Contingency Plan
- Who declares an escaped fire
- Who is in charge in case of escape
- Locations of secondary control lines
- Fire Sensitive Areas

## <u>Element 12</u> – Safety and Medical Information

 Describe provisions to be made to provide for public and personnel safety. Include descriptions of escape routes, safety zones, known hazards, description of emergency medical procedures, and locations of emergency facilities.

#### Element 13 – Post–Burn Activities

 Describe the follow-up activities to ensure containment of prescribed burn and list the monitoring requirements to determine whether the prescribed burn met the established objectives.

#### ■ Element 14 – Maps

 Include burn unit map with scale and north arrow and consider including a smoke screening map and emergency medical facility location map.

## <u>Element 15</u> – Burn Day Checklist (Go/No-Go Checklist With Burn Boss Signature Block)

- Prior to ignition operations, the burn boss will complete and sign a burn day checklist necessary to ensure the safety of the public and burn personnel, as well as for the control of the prescribed burn. The checklist should ask the following questions:
  - ✓ Have all contacts been made?
  - ✓ Are all equipment and personnel available?
  - ✓ Are weather forecasts within parameters?
  - ✓ Has the area experienced unusual drought or above normal fuel loading?
  - ✓ Have smoke sensitive areas been mitigated?
  - ✓ Have required permits and waivers been obtained?
  - ✓ Have all personnel been briefed on project objectives, assignments, safety hazards, escape routes, and safety zones?
  - ✓ Can the burn be carried out according to the Prescribed Fire Plan and will it meet the planned objectives?
  - ✓ The checklist should include a burn boss signature block.

#### ■ Element 16 – Crew Briefing Checklist

- All assigned burn personnel should be briefed prior to ignition operations. Briefing checklist should include the following elements:
  - ✓ Burn unit size and boundaries
  - ✓ Burn unit hazards and safety issues including LCES
  - ✓ Purpose of burn and objectives
  - ✓ Current and expected weather
  - ✓ Anticipated fire behavior and smoke behavior
  - ✓ Organization of crew and assignments
  - ✓ Methods of ignition, holding, mop-up, and communications
  - ✓ Contact with the public and traffic concerns
  - ✓ Location of main roads, vehicles, keys, and nearest phone
  - ✓ Contingency plans
  - ✓ Plan for medical emergencies
  - ✓ Wildland Urban Interface concerns

_	ppendix A: rn Plan Template		
DUI	m Plan Template		
1)	Planning Information Burn Unit Name: Size: Burn Plan Preparer Name: Signature: Address: Phone number: Date Prepared:		
	Reviewed by:	Signature:	
2)	Geographic Information County: Coordinates: Description of Location (narra	tive):	
3)	Sources of Emergency Assista	nce:	
	Description	Contact Point Person	Phone Number
4)	vegetation type and fuel mode	els within and adjacen	topography, and size of burn unit. Describe It to unit. List any special features, issues and/oi t, T&E species or habitat, and etc.)
5)	Goals and Objectives: Goals: Objectives:		

6)	<u>Fuel and Weather Prescriptions</u> (define a range of fuel and weather conditions during which the controlled burn may be ignited and held.):							
	Conditions	Minimum	Preferred	Maximum				
7)	Fire Behavior (Descri	be the fire behavior (	desired in order to	meet objective listed	d in section 5):			
8)	Smoke Management (Identify smoke sensitive areas in a radius appropriate for burn unit size and fuel type including; roads, homes, airports, hospitals, Class I air sheds,							
	chicken houses, and etc. Include desired wind direction in order to mitigate sensitive areas.							
	List required burn permits and/or notifications for burns in or adjacent to non-attainment areas.)							
9)	Burn Organization (S of the controlled burn of the burn.)							

**11)** Managing the Burn (Include a description of each topic listed)

**Firebreak Preparation** 

**Ignition Plan** 

**Holding Plan** 

**Back up sources of water** 

**Communications** 

**Mop Up Standards** 

**Public Relations** 

**Notifications** 

**Legal Considerations** (describe ownership, management etc.)

**Contingency Plan** 

Who declares an escaped fire?

Who is in charge in case of escape?

**Locations secondary control lines** 

**12) Safety and Medical Information** (Describe provisions to be made to provide for public and personnel safety. Include description of emergency medical procedures and locations of emergency facilities.) **Escape routes and safety zones:** 

**Hospital Directions:** 

- **13) Post-Burn Activities** (Describe the follow up activities to ensure containment of prescribed burn. List the monitoring requirements to determine whether the prescribed burn met objectives.)
- **14) Maps** (Include burn unit map with scale and north arrow. Consider including smoke screening maps and emergency medical facility location map.)

# 15) Burn Day Checklist (Go/No-Go Checklist below)

# PRE-BURN GO/NO GO CHECKLIST

Site Name:	Burn Unit:	Date:	
or does it prescription	ea (inside and outside the unit) experienced unusual drought conditions contain above-normal fuel loadings which were not considered in the on development?  go to question number 2.	YES	NO
-	continue to checklist.		
2) If YES, have	e appropriate changes been made to plans for ignition, holding, mop-up, ? If YES, continue with Section A. If NO, stop and consult Fire Manager.	YES	NO
Required fire Certified Burn Required nun Weather fore Official and n Required equ Crew has insp Planned ignit Planned cont List of emerg	BRIEFING s described in plan and copy of plan is on site breaks complete and are consistent with current and predicted conditions in Boss present, permits obtained - List permit #'s: inber of crew present with required protective clothing ecast obtained & within prescription, long-range forecast checked for chanceleighbor notifications complete uipment for holding, weather monitoring, ignition, and suppression is on-site beected equipment ion and containment methods are appropriate for current and predicted condition ency phone numbers are in each vehicle ingency resources are operational and available	ce of sever te and fun onditions	
Burn unit size Burn unit haz Purpose of bu Organization Methods of ig Contact with Location of m Location of b Contingencie Contingencie Wildland Urb Ask if any que Each item aborellors to IGNITI On-site weat	ember has a map e and boundaries tards and safety issues, including LCES urn, anticipated fire and smoke behavior of crew and assignments gnition, holding, mop-up, and communications the public and traffic concerns nain roads, vehicles, keys, and nearest phone ack-up equipment, supplies, and water as for escaped controlled burn as for medical emergency than Interface concerns eestions from crew and answer accordingly ove has been discussed with crew	t	
Burn Boss:	Signature:		

## Appendix B:

Prescribed Burning Notification Procedures for Kentucky Certified Burn Bosses when burning under KRS 149.175 exemption.

149.175 Exemption from chapter's requirements for persons certified by the Kentucky Prescribed Fire Council's Burn Boss Program -- Exceptions.

- (1) The Division of Forestry may exempt any person certified by the Kentucky Prescribed Fire Council's Burn Boss Program from the requirements of this chapter, except that fires set under this section shall be in accordance with KRS 149.375 and shall not be conducted under a local burn ban or under a red flag warning day as determined by the National Weather Service.
- (2) Persons exempted under this section who set prescribed fires shall give notification of the burn to the Division of Forestry at least twenty-four (24) hours prior to the burn, and notify adjacent landowners and local emergency dispatch the day of the burn. Effective: July 15, 2016 History: Created 2016 Ky. Acts ch. 30, sec. 1, effective July 15, 2016

In addition to notifying adjacent landowners and emergency dispatch on the day of the prescribed burn Kentucky Division of Forestry requires the following process:

The KDF has created six (6) email inboxes for receiving notifications of intent to conduct a prescribed fire. These email inboxes correspond with geographic branches (formerly regions) of the KDF. Notification emails for the Madisonville Branch should be sent to <a href="mailto:RxfireMadisonville@ky.gov">RxfireMadisonville@ky.gov</a>, the Campbellsville Branch at <a href="mailto:RxfireCampbellsville@ky.gov">RxfireCampbellsville@ky.gov</a>, the Frankfort Branch at <a href="mailto:RxfireHazard@ky.gov">RxfireCampbellsville@ky.gov</a>, the Hazard Branch at <a href="mailto:RxfireHazard@ky.gov">RxfirePineville@ky.gov</a>, and the Pineville Branch at <a href="mailto:RxfirePineville@ky.gov">RxfirePineville@ky.gov</a>. Each Kentucky Certified Burn Boss (KCBB) will receive their unique identification number through email communication.

KCBBs shall submit the "Burn Plan Element Certification" form and the completed burn plan to the appropriate KDF branch office's Rx fire email inbox at least 24 hours prior to the scheduled burn. The subject line of the email shall read, "County, KCBB ID #, KCBB name, property name, number of burn units, initial report". On the morning of the prescribed fire, KCBBs should contact the KDF branch office via telephone. The purpose of this phone call is to ensure the KDBB and KDF are up-to-date on the plans for that day and for facilitating a weather condition discussion if necessary.

The KCBB shall send a status email to the appropriate Rx fire email inbox on the day following the prescribed fire. The subject line of the status email should read, "County, KCBB ID #, KCBB name, property name, property name, number of burn units, status report". The body of the email should contain information that indicates if the prescribed fire was completed, partially completed (may be completed this fire season), suspended (no burning took place and may be burned this fire season), or cancelled (no burning took place and won't be burned this fire season). Also the KCBB should include the number of acres burned for the notification form submitted.