3.01 Purpose

To establish a functional set of procedures for Kemah Fire Department (KFD) Personnel during the incident response to dry vegetation fires ranging from small grass fires to forest fire deployments.

3.02 Policy

This policy will include the following items:

- First Arriving Unit Duties
- Contributing Factors (weather, fuel, and topography)
- Tactics
- Safety
- PPE

3.03 Procedure

3.03.01 First Arriving Unit Duties

The first arriving unit shall establish command and name the fire. This unit shall direct the next arriving units. If possible, the first arriving can start fire operations while maintaining command.

The Incident Commander shall then:

- Identify the actual location of the fire.
- Size up the fire in acres (football fields), determine the rate and direction of spread, fire behavior, i.e., running, creeping, fast moving, describe the type of fuels, grass, brush, trees.
- Identify the actual location of the fire.
- Identify the best access points.
- Identify values at risk, i.e., homes, businesses, power and infrastructure
- Determine the need to evacuate people early.
- Direct in-coming units to operations or staging locations
3.03.02 Contributing Factors

Weather
- Consider Winds, Temperature, Relative Humidity (RH), Storm Fronts, Lightning
- Relative humidity is a major factor for the ability of a wildland fire to take place and when the humidity drops below 40% the danger grows.
- Strong winds along with the humidity can cause dangerous and unpredictable conditions, always be aware of wind direction during operations.

Fuel
- Consider Drought, Fuel Moisture, Fuel Loading, Fuel Type, Arrangement/Continuity. Most of the fuel in Galveston County is made up of light contents and will burn very rapidly, these fires will be easily controlled but when mutual-aided or on deployment to surrounding jurisdictions be aware of heavier fuel loads.

Topography
- Consider Slope (Steepness), Aspect, Elevation
- Fire burns uphill much more rapidly than downhill and considerations of spot fires on the receding slope are a possibility.
- These topography concerns also make travel difficult and the incident command’s size-up should consider access roads and possible exposures

3.03.03 Tactics
- Attack the fire beginning at a safe anchor point, normally at or near the rear of the fire.
  - Work up the flanks to the head and pinch off the head.
  - Then, secure the line by thorough mop up.
- On large fires it may be necessary to identify where the fire can most easily be stopped, i.e., a road, stream, rockslide, etc.
  - In these cases, it might be better to allow the fire to burn to this control point and hold the fire there.
3.03.04 Safety

- Always have two ways out to avoid being burned over or trapped.
- Apply the Ten Standard Firefighting Orders are a set of systematically organized rules designed by a USDA Forest Service task force to reduce danger to personnel and increase firefighting efficiency. (See list below)
- Walk rough terrain and whenever in four-wheel drive. Put the vehicle in four-wheel drive BEFORE going off an improved roadway. Avoid driving through heavy brush.
- Know who is near you and be sure you can talk (or communicate effectively by radio) to them.
- Advise Incident Command of all potential problems.
- Always have a lookout.
- Watch for spot fires, aircraft making water or retardant drops. Monitor weather conditions and report changes in wind direction, flame height, changes in fuels, etc.
- Be alert for downed power lines.
- Take frequent water/rest breaks if the firefight will be longer than an hour.
- NEVER go downhill to fight a wildfire. Come in from below the fire. Whenever possible attack the flames directly
- Consider leaving a 1/4 tank of water in the booster truck for safety

3.03.05 PPE

KFD Personnel operating at state/federal wildland fire incidents or natural/man-made disasters shall adhere to department SOP’s and all personal protective equipment required under current by the Texas Forest Service shall be worn.
All personal protective equipment should be brought on Type 1 engine deployments.

- Wildland Assignment
  - Nomex shirt or jacket
  - Nomex Pants
  - Department issued wildland boots
  - Helmet, goggles, gloves, and hearing protection (when needed).
  - All cotton undergarments should be worn under PPE. It is recommended that long pants and long sleeve cotton shirts be worn underneath the Nomex protective ensemble (especially with department issued brush pants), to double the protection from radiant heat.

- Structure Assignment - Current Kemah Fire Department PPE and SCBA

3.03.06 USDA Forest Service task force The Ten Standard Firefighting Orders

1. Keep informed on fire weather conditions and forecasts.
2. Know what your fire is doing at all times.
3. Base all actions on current and expected behavior of the fire.
4. Identify escape routes and safety zones and make them known.
5. Post lookouts when there is possible danger.
7. Maintain prompt communications with your forces, your supervisor, and adjoining forces.
8. Give clear instructions and ensure they are understood.
9. Maintain control of your forces at all times.
10. Fight fire aggressively, having provided for safety first.

END OF SECTION