Guidelines for Blacklines: Using mow lines and wet lines

**Blackline**

A blackline is a burned-out area of fuel creating a control line or reinforcing an already existing control line by widening it. Blacklines are often used in conjunction with ‘soft lines’ like mow-lines or other fire lines like plow lines, two tracks, narrow roads or even cow trails or hand lines. The intent is to create a control line you can use in the future (same day or weeks later) and not ignite the entire burn unit.

While creating a blackline you must be able to control and extinguish your fire once it has reached the required size or width. Blacklineing requires close coordination between all the firefighters involved including the igniters, the vehicle drivers and nozzle-men. The typical scenario can be a 3-5 person squad with one engine or a 5-8 person module with two engines.

**Wet line**

A wet line is a continuous line of water sprayed into the grass that backing fire cannot cross. A wet line is not intended to hold against flanking or head fire. A narrow, one pass wet line can typically contain a 3-9” flame length. Gaps or dry sections in your wet line can allow the fire to escape.

**Mow line**

A mowed control line. By removing the standing grass we can reduce the flame lengths and improve the effectiveness of wet lines and hand tools.

Combine the use of wet lines on mow lines, while making blacklines, when available. Using the center of the mow line to lay down wet line for your exterior perimeter allows for lower flame length and more time to identify a creep through.

**Single Engine Blackline**

Use one engine with two nozzles to spray two parallel wet lines at the designated width. Then igniter(s) should carefully burn out the grass between the wet lines without causing flare-ups or head fire running at the wet lines and causing control problems. There is usually a stagger between the two nozzles. The lead nozzle is determined by the wind direction.

**Double Engine Blackline**

Using one Engine in the lead and one engine behind, and using one nozzle from each engine, lay two parallel wet lines. Then igniter(s) should carefully burn out the grass between the wet lines without causing flare-ups or head fire running at the wet lines and causing control problems. There is usually a stagger between the two nozzles. The lead nozzle is determined by the wind direction.

**Firefighter Position Descriptions**

All Firefighters:

* Follow instructions from crew leader (could be ENGB(t) or FIRB(t) or other).
* Keep heightened situational awareness, use all of your senses and have your head on swivel; look for flare-ups, spot fires, slop-overs, changing fuels and other potential threats and hazards.
* Communicate problems and needs immediately to your fireline supervisor. Use common terminology.
* Pay attention to the location of the fire, the effectiveness of the wet lines, the location of other firefighters and equipment.

Vehicle driver:

* Maintain visual reference and verbal communications with firefighters who are working around the vehicle.
* Understand that several firefighters are working closely to the vehicle and do not make any sudden or fast maneuvers.
* Use all the mirrors, and have the windows partially down to hear other firefighters, do not listen to music or be distracted in other ways.
* Know the location of the active fire and how close it is to your vehicle. Avoid driving over fire or getting to close to open flame.
* Close all windows and doors when you leave the vehicle unattended.

Nozzelman:

* Responsible for verbal and non-verbal communications with driver and igniters; ensure safety for firefighters, equipment and control over the fire.
* Ensure water is delivered at designated location to create a barrier to fire’s spread
* Be ready to extinguish spot fires, slopovers and flare-ups.
* Maintain the pump’s operation and be aware of water consumption. Inform driver and crew boss when you are at 50% and 25% full.
* Do not run out of water leaving the blackline with active fire and no way to extinguish it.

Igniter:

* Use backing and flanking fire to minimize flame lengths and maintain control.
* Maintain awareness of location of firefighters and equipment.
* Be aware of changes in wind, direction of travel, control line location and fuel.
* Don’t trap yourself or others with fire.
* Don’t use head fire.

Holder/Patrol:

* Backpack pumps are very effective in grass; more effective than hand tools. Shovels and Flappers are the most effective hand tools in grass.
* The line should cool down quickly after ignitions, continue to patrol line and look for creeping fire or potential spot fires and slopovers.
* Long range patrols should be accomplished back to point of origin throughout the shift.