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## 8.8 Burning

MVP does not anticipate burning on the National Forest; however, if necessary or requested by the JNF, prior to burning brush, MVP will complete a burn plan and submit it to the Duty Officer for review and approval. In addition, MVP will apply for all applicable permits from the proper agencies and adhere to all local ordinances. Notifications will be given to local fire departments about the locations and durations that burning activities will be taking place. All burning activities will be supervised by a qualified fire watch and equipped with a fire extinguisher and other applicable suppression equipment and materials such as sand or water. The fire watch will monitor all burning activities until all fire or smoldering debris is extinguished. All debris will be extinguished prior to leaving the work area each day. All brush that will be burned will be started using a propane torch only. There will not be any additives used to enhance the start of the fire or to maintain the fire.

## 9.0 FIRE AND EMERGENCY RESPONSE EQUIPMENT

### 9.1 Construction Vehicles

All foreman vehicles and crew buses assigned to the construction area will be equipped with one 10-pound ABC fire extinguisher, one shovel, and an operable backpack water pump of four-gallon capacity. One water truck per construction spread during blasting “red flag warnings” and a fire danger rating of “Planning Level 4 or 5” will be outfitted with a pressure pump, adjustable nozzle, threaded rubber-lined hose with a minimum of 300 feet of 1½-inch cotton jacket, and have a minimum water storage capacity of 1,500 gallons. Water trucks on the right-of-way will be able to help with wildfire fighting in the vicinity of the Project. The construction companies use water trucks that typically have a 4,000-gallon capacity and 150 feet of 1½-inch water hose that would support fire suppression activities. Many of these vehicles have water cannons mounted on the roof. All vehicles and auxiliary equipment will be equipped with properly functioning and baffled exhaust systems.

### 9.1 Fire-Fighting Tools

At least three 10-person tool caches will be maintained per spread. One cache will be placed in an EI’s vehicle. The second cache will be located with the Spread Superintendent or Facility Superintendent. The third cache will be assigned to the FSO. Toolboxes will be red in color, sealed with metal box-car-type seals, and labeled “For Fire Fighting Only.” The tool caches will contain the following:

- 10 electric headlamps with batteries;
- one first aid kit, 10-person unit;
- two knapsacks;
- five pulaskis with sheaths;

- five long-handled, round-point, size 0 shovels;
- five fire rakes; and
- 10 one-gallon canteens, filled with water.

The Spread Superintendent will expedite delivery of the tool caches upon request of the FSO or AO or when alerted to an emergency requiring the tools. In case a tool cache or first aid kit has been used, it will be immediately replenished. All replenished tool caches or first aid boxes will be inspected by the FSO. These will then be resealed before being returned to the construction site.

## 10.0 EVACUATION

During an emergency evacuation, MVP will depend upon response teams, consisting of trained personnel, to attend to injured and/or trapped victims. Construction workers providing medical attention will not help beyond their capability. MVP will establish a site-specific emergency communications system utilizing cell phones, hand-held radios, and/or satellite phones to notify workers of emergencies and contact local law enforcement and fire departments. If an immediate evacuation of a construction work area is required, the Chief Inspector, Spread Supervisor, FSO, EI, or other supervisor will direct the evacuation via the nearest escape route to a “safe area.” Otherwise, evacuations will be directed by local emergency responders. Designated evacuation wardens will be assigned to each spread or station to account for all personnel present before, during, and after the evacuation. Construction workers will not return to an evacuated work area until emergency responders have deemed it safe and the Chief Inspector, Spread Supervisor, or Facility Superintendent has given an “all clear” signal.

## 11.0 LITERATURE CITED

- Massman, W.J., J.M. Frank, and N.B. Reisch. 2008. Long-Term Impacts of Prescribed Burns on Soil Thermal Conductivity and Soil Heating at a Colorado Rocky Mountain Site: a data/model fusion study. *International Journal of Wildland Fire* 17:131–146.
- FS (U.S. Department of Agriculture, Forest Service). 2004. Land and Resource Management Plan Jefferson National Forest. Management Bulletin R8-MB 1154. January 2004.

**ATTACHMENT X-1  
FIRE MANAGEMENT STANDARDS AND GUIDELINES**

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The 2004 *Revised Land and Resource Management Plan* contains the following applicable fire management standards and guidelines:

- FW-134: Ensure firefighter and public safety as the first priority. Secondly, protect property and natural and cultural resources based on the relative values to be protected.
- FW-135: Suppress human-caused wildland fires (either accidental or arson).
- FW-136: The full range of suppression tactics (from full suppression to monitoring) may be used, consistent with forest and management prescription direction.
- FW-137: Suppress wildland fires at minimum cost, considering firefighter and public safety, benefits, and values to be protected, consistent with resource objectives.
- FW-138: Where needed to prevent erosion, firelines are revegetated and water-barred promptly after the fire is controlled.
- FW-139: The management of lightning caused wildland fires is allowed when the Fire Management Plan is completed and a Wildland Fire Implementation Plan is approved for the specific wildland fire.
- FW-140: Lightning-caused fires are allowed to play their natural ecological role as long as they occur within prescribed weather and fuel conditions and do not pose unmitigated threats to life and/or private property, particularly to that property within the wildland/urban interface zone.
- FW-141: Use existing barriers, e.g. streams, lakes, wetlands, roads, and trails, whenever possible to reduce the need for fireline construction and to minimize resource impacts.
- FW-142: Best available smoke management practices will be used to minimize the adverse effects on public health, public safety, and visibility in Class I areas (James River Face Wilderness and Shenandoah National Park) from prescribed fire.
- FW-143: Conduct prescribed burning only if meteorological conditions ensure that smoke will be carried away from areas with a high forecasted Air Quality Index (Orange or higher).
- FW-144: All managed burns will comply with Smoke Management Programs for Virginia and West Virginia, when these are implemented. (Per EPA's "Interim Air Quality Policy on Wildland and Prescribed Fires," which was developed with involvement of the FS).
- FW-145: Identify caves or abandoned mines that contain significant populations of bats as smoke-sensitive targets. Avoid smoke entering these caves or mines when bats are present.
- FW-146: Do not conduct prescribed fires when the Keetch-Byram Drought Code (Cumulative Severity Index) is 200 points above the average for the relevant time of the year.
- FW-150: Only mowing, chopping, or shearing treatments are used on sustained slopes over 15 percent. No heavy equipment is used for mechanical fuels

treatments on sustained slopes over 35 percent. Mechanical fuels treatments are prohibited on sustained slopes over 20 percent when soils have a high erosion hazard or are failure-prone.