APPENDIX X
Fire Prevention and Suppression Plan

Appendix X

Fire Prevention and Suppression Plan

Mountain Valley Pipeline Project

Prepared by:

Mountain Valley PIPELINE LLC

May 10, 2023

TABLE OF CONTENTS

LIST OF ATTACHMENTS

ACRONYMS AND ABBREVIATIONS

AOs	Authorized Officers
BLM	U.S. Department of the Interior, Bureau of Land Management
Certificate	Certificate of Public Convenience and Necessity
CFR	Code of Federal Regulations
EACG	Eastern Area Coordination Group
EIs	Environmental Inspectors
FERC	Federal Energy Regulatory Commission
FS	U.S. Forest Service of the U.S. Department of Agriculture
FSOs	Field Safety Officers
ICS	Incident Command System
JNF	Jefferson National Forest[1]
MVP	Mountain Valley Pipeline, LLC
NIMS	National Incident Management System
OSHA	Occupational Safety and Health Administration
Project	Mountain Valley Pipeline Project
SACC	Southern Area Coordination Center
SACG	Southern Area Coordination Group
Transco	Transcontinental Gas Pipe Line Company, LLC
USACE	U.S. Army Corps of Engineers
Weston and Gauley Turnpike	Weston and Gauley Bridge Turnpike Trail

[1] Jefferson National Forest refers to the southern portion of the current George Washington & Jefferson National Forests throughout this document. Originally two separate national forests, the JNF and the George Washington National Forest were administratively combined in 1995 and are administered as a single national forest unit.

Mountain Valley Pipeline Project
Fire Prevention and Suppression Plan

1.0 INTRODUCTION

Mountain Valley Pipeline, LLC (MVP), a joint venture between EQM Midstream Partners, LP; NextEra Capital Holdings, Inc.; Con Edison Gas Midstream LLC; WGL Midstream; and RGC Midstream, LLC (collectively referred to as MVP), was issued a Certificate of Public Convenience and Necessity (Certificate) from the Federal Energy Regulatory Commission (FERC) on October 13, 2017, pursuant to Section 7(c) of the Natural Gas Act authorizing it to construct and operate the Mountain Valley Pipeline Project (Project) located in 17 counties in West Virginia and Virginia. The Project is an approximately 303-mile, 42-inch-diameter natural gas pipeline to provide timely, cost-effective access to the growing demand for natural gas for use by local distribution companies, industrial users, and power generation in the Mid-Atlantic and southeastern markets, as well as potential markets in the Appalachian region.

The pipeline extends from the existing Equitrans, L.P. transmission system and other natural gas facilities in Wetzel County, West Virginia to Transcontinental Gas Pipe Line Company, LLC's (Transco) Zone 5 compressor station 165 in Pittsylvania County, Virginia. In addition to the pipeline, the Project includes approximately 171,600 horsepower of compression at three compressor stations along the route, as well as measurement, regulation, and other ancillary facilities required for the safe and reliable operation of the pipeline. The pipeline is designed to transport up to 2.0 million dekatherms per day of natural gas.

A 3.5-mile long segment of the Project crosses portions of the Jefferson National Forest (JNF) in Monroe County in southern West Virginia and in Giles, Craig, and Montgomery counties in southwestern Virginia. The JNF is managed by the U.S. Forest Service (FS) of the U.S. Department of Agriculture. Another 60-foot segment of the Project crosses the Weston and Gauley Bridge Turnpike Trail (Weston and Gauley Turnpike) in Braxton County, West Virginia, which is administered by the U.S. Army Corps of Engineers (USACE). Approval to cross land managed by two or more federal agencies is the responsibility of the U.S. Department of the Interior, Bureau of Land Management (BLM) through issuance of a Right-of-Way Grant. Project-wide construction environmental compliance is the responsibility of the FERC. The FS and USACE will also ensure compliance across lands managed or administered by those agencies. Because the majority of federal lands crossed are managed by the FS, this plan focuses on the JNF, noting any additional or different requirements that are specific to the crossing of the Weston and Gauley Turnpike.

Construction of the Project segment that crosses the Weston and Gauley Turnpike was completed in 2018. Construction of the Project segments across the JNF began in 2018 but were not completed and progress is on hold due to a July 27, 2018, order by the U.S.

Court of Appeals for the Fourth Circuit vacating and remanding the Right-of-Way Grant and a subsequent Stop Work Order issued by FERC.

The FS is responsible for enforcement of the terms and conditions of the BLM's Right-of-Way Grant on National Forest System lands during the term of the Right-of-Way Grant for the Mountain Valley Pipeline project. Compliance will be monitored on the JNF portion of this project by the FS Project Manager and the Authorized Officer's designated compliance monitors. FS will have stop work authority per terms outlined in the BLM right-of-way grant. FS will also have stop work authority if unsafe work conditions are encountered during construction.

The Project has potential to impact sensitive environmental resources and, as a result, environmental protection measures have been developed to minimize potential impacts on these resources and will be applied, as applicable, to the Project.

2.0 PURPOSE

The purpose of this Fire Plan is to identify best management practices for preventing fires and responding to inadvertent fires that could occur during construction of the Project. The Fire Plan identifies responsibilities and procedures for suppressing fire ignitions, responding to and reporting fire emergencies, and working with emergency response agencies in the event of fire, regardless of cause. The Fire Plan is designed to be consistent with applicable federal and state/commonwealth laws, regulations, plans, and policies, including Chapter 14 of the 2003 International Fire Code (Combustible Dust-Producing Operations) and Section A104 of the International Wildland-Urban Interface Code (Ignition Source Control).

The Fire Plan provides an implementation strategy to ensure immediate and aggressive action to suppress inadvertent fires that occur during construction of the Project and establishes protocols and lines of communication for reporting fires that occur. Implementation of the Fire Plan will ensure that proper types and quantities of safety and fire extinguishing equipment are available in construction areas to suppress fires and that construction workers are adequately trained for response to fires. The Fire Plan will be used to familiarize MVP personnel with basic fire emergency planning, response, and evacuation procedures and their individual roles in fire prevention and suppression. Planning and training will help MVP personnel respond effectively in the event of a fire, thereby avoiding or minimizing injuries and/or damage to property or the environment.

MVP will comply with all requirements of the Land and Resource Management Plan (Forest Plan) in relation to fire prevention and suppression. Refer to Attachment X-1 for a list of applicable fire management standards and guidelines.

3.0 BACKGROUND

Fire has played a major role in the landscape and ecosystems of the JNF. The Forest Plan for the JNF indicates that fires typically occurred in this area every 9 to 11 years throughout the nineteenth and early twentieth centuries (FS 2004). Most of these fires are thought to have occurred during the dormant vegetative seasons (typically in early spring). The Forest Plan states that "[t]he ecosystems we know today [*within the Jefferson*

National Forest] developed within the influence of both climatic and human forces" and that "[t]he result is a forest with a diversity and flexibility that is well adapted to fire occurrence" (FS 2004).

Prescribed fire is an important tool used by the FS to achieve the Forest Plan's Desired Conditions. The Forest Plan identifies the following FS Goals and Objectives in regard to prescribed fires:

GOAL 18: Fire regimes are restored within or near the historical range (Condition Class 1) resulting in maintenance and restoration of ecosystem components.

OBJECTIVE 18.01: Maintain a prescribed burn cycle of 3-8 years in fire-maintained forest and grassland communities containing threatened, endangered, sensitive, and locally rare species. (For example: piratebush, box huckleberry, smooth green snake, and sword-leaf phlox).

OBJECTIVE 18.02: Maintain a prescribed burn cycle of 4-12 years in Dry and Xeric Oak Forest, Woodlands, and Savannas and in Xeric Pine and Pine-Oak Forest and Woodland communities.

OBJECTIVE 18.03: Maintain a prescribed burn cycle of 8-20 years in Dry-Mesic Oak Forest, and Dry and Dry-Mesic Oak-Pine Forest communities.

OBJECTIVE 18.04: Reduce hazardous fuels across 4,200 acres per year with priority given to areas where fire regimes have been moderately (Condition Class 2) or significantly (Condition Class 3) altered from their historic range; and areas affected by insects, diseases, ice damage, or along National Forest boundaries with high values at risk.

It is expected that the FS will continue to use prescribed fires as a tool to manage the portions of the JNF crossed by the Project. MVP and its contractors will work closely with affected emergency response and jurisdictional agencies regarding fire control and management. For safety reasons, prescribed fires would not be recommended in the general Project area during active construction periods unless they could be conducted in a manner that would not pose a risk to workers' health and safety or the construction area. However, no restrictions on prescribed fires are anticipated during the operational phase of the Project because such fires would not be expected to adversely affect the safety or reliability of the pipeline while in operation. This is because the heat generated by a prescribed fire would not be intense enough to damage the portion of the Project located on the JNF. All Project facilities located on the JNF would be buried, and soil has been found to be an effective insulator against fire-generated heat. In one study, soil temperature from intense slash pile burns reached a maximum of only about 50 degrees Celsius (122 degrees Fahrenheit) at a depth of about 24 inches directly under the burn

pile (Massman et al. 2008), which is not intense enough to damage a buried natural-gas pipeline.

Construction and operation of the Project could increase the risk of wildland fires on the JNF, especially if Project-related activities (e.g., mowing, welding, refueling with flammable liquids, and parking vehicles with hot mufflers or tailpipes on tall dry grass) occur during the fire season. Even small fires created during these activities could have far-reaching consequences. For example, large forest fires could occur if small/low-intensity herbaceous/shrub ground fires, ignited within the herbaceous or shrub cover maintained along the permanent right-of-way, utilize the dense vegetation located near forest edges as a ladder, allowing access to the forest's canopy. This could trigger a high-intensity crown fire in pine dominated forests that could spread to adjacent areas, away from the pipeline's route. However, the pipeline's cleared right-of-way could also serve as a potential fire break for large crown fires that were ignited in other areas, thereby reducing the extent of a fire's spread. Also, firefighters and Forest Service employees could use the cleared right-of-way to gain access to remote areas while conducting prescribed fires or fire suppression activities. Therefore, the Project's right-of-way has the potential to alter the frequency and extent of fires, as well as aid agencies in the management of fires in the area.

4.0 TRAINING

Prior to the start of construction, MVP will conduct environmental and safety training for MVP and contractor personnel. The training program will focus on the FERC's *Upland Erosion Control, Revegetation, and Maintenance Plan and Wetland and Waterbody Construction and Mitigation Procedures;* other construction, restoration, and mitigation plans, including this Fire Plan; and applicable permit conditions. In addition, MVP will provide large-group training sessions before each work crew begins construction with periodic follow-up training for groups of newly assigned personnel.

Training for fire suppression and response will include:

- the chain of command and fire reporting process;
- emergency contacts and numbers;
- basic fire prevention behavior controls;
- basic uses of hand tools, water backpacks, and other fire suppression equipment;
- fire suppression procedures and precautions; and
- emergency response and evacuation procedures.

Contractor Safe Work Rules will also provide a general overview of specific MVP policies and procedures and highlights of relevant Occupational Safety and Health Administration (OSHA) standards for General Industry and Construction. This document does not include all of the standards or procedures that may be applicable to a job or task, nor is it inclusive of all of the information that may be necessary to be in compliance.

Fire prevention is extremely important at MVP. Aside from natural gas, there are additional fire hazards posed by hydrocarbons, liquids, crude oil, and condensate. Also,

there may be flammable compressed gases and ordinary combustibles depending on the work site and the jobs being performed. Contractors must comply with OSHA 29 Code of Federal Regulations (CFR) § 1910.39, Fire Prevention and Suppression Plan, and 1926.151, Fire Prevention. Contractors must take appropriate steps and preventive measures to minimize the potential for a fire. These steps include, but are not limited to, the following:

- only smoke in designated areas;
- do not allow trash or flammable materials to accumulate;
- identify and protect or eliminate potential sources of fuel, if possible;
- recognize and eliminate potential ignition sources, including static electricity;
- keep flammable liquids in approved, self-closing containers;
- learn the location of firefighting equipment, emergency shutdowns, and alarms;
- equip each piece of construction equipment with a fire extinguisher; and
- ensure that all inspectors and managers on site have fire extinguishers with their vehicles.

5.0 COORDINATION

All MVP personnel, including contractors, will be responsible for complying with applicable laws and regulations for fire prevention and suppression as well as the measures described in this Fire Plan. MVP and its contractors will be responsible for fire prevention during construction. MVP, along with the appropriate emergency response or jurisdictional agencies, will be responsible for fire suppression and investigation. FS personnel will assume responsibility for fire suppression on National Forest System lands as soon as they arrive on the scene of the incident.

Interagency coordination of wildfire management in the southeastern United States is overseen by the Southern Area Coordination Group (SACG), which includes representation from federal land- managing agencies and state/commonwealth forestry agencies. The SACG and an adjunct organization, the Southern Area Coordination Center (SACC), include Virginia. Virginia also has a center for coordination of wildfire management. Interagency coordination of wildfire management in the northeastern United States is overseen by the Eastern Area Coordination Group (EACG), which includes representation from federal land-managing agencies and state/commonwealth forestry agencies. The EACG and an adjunct organization, the Eastern Area Coordination Center, encompass West Virginia. Virginia and West Virginia both have fire prevention and suppression laws, regulations, and programs. Responsible agencies include the West Virginia Division of Forestry and Virginia Department of Forestry. Each of these agencies participates in the appropriate SACG and EACG for coordination of wildfire management. When a fire is initially reported, local and partner firefighting agencies initially respond to the emergency. A local agency can ask for support from the appropriate state/commonwealth or a regional coordination center if a fire could or does exceed the response capabilities of the local agency. The state/commonwealth or regional coordination center may in turn request support from

the National Interagency Coordination Center if a regional center exhausts its fire suppression resources. During a fire emergency, coordination is implemented through the Incident Command System (ICS), which is part of the National Incident Management System (NIMS). ICS is a standard incident management system used by firefighters and emergency medical teams to establish an organizational structure for management. A chain of command initially is established by the local response agencies to direct the response. As an incident progresses, personnel with higher authority and training assume responsibility for directing the response. ICS and NIMS provide a framework that assists agencies, non-governmental organizations, and the private sector in preventing, responding to, and mitigating the effects of incidents and ensuring an appropriate response based on the capabilities of response agencies.

5.1 Responsibilities

The construction contractors working on the Project will be required to implement the provisions of this Fire Plan. Additionally, each contractor will be required to prepare and implement an individual fire control plan, which will identify responsibilities and describe actions to be implemented by the contractor in the event of an inadvertent fire. Copies of each fire control plan will be appended to this Fire Plan and provided to the FS for its review. The key persons responsible for fire prevention and suppression during construction of the Project are Chief Inspectors, Spread Superintendents, Field Safety Officers (FSOs), Facility Superintendents, Environmental Inspectors (EIs), and Authorized Officers (AOs). Contact information for these persons will be appended to the "issued-for-construction" Fire Plan prior to the start of construction. At a minimum, each construction spread for the pipeline and each aboveground facility site will have one FSO trained in accordance with National Fire Protection Standards 1521, Chapter 4, Responsibilities for a Health and Safety Officer.

5.2 Construction Contractor's Chief Inspector

The Chief Inspector will be responsible for oversight of all activities along the pipeline, including fire prevention and suppression.

5.3 Construction Contractor's Spread Superintendents

Spread Superintendents will be responsible for general construction operations associated with their individual spreads including compliance with this Fire Plan. Spread Superintendents will be in communication with Chief Inspectors, FSOs, EIs, AOs, and local emergency response, as necessary, to ensure that construction personnel are aware of fire hazards and prevention methods. Spread Superintendents will coordinate with Federal, State/Commonwealth, and local emergency responders during periods of high or severe fire conditions to ensure that appropriate preventive measures are in place during construction. Spread Superintendents also will be responsible for:

- monitoring construction areas to identify fire hazards and risks;
- developing and implementing fire protection strategies;
- ensuring adequate firefighting equipment is deployed to high-risk areas and that equipment is visible and accessible;

- ensuring that all firefighting equipment is inspected on a regular basis and maintained in good condition; and
- reporting all fire starts within or near the vicinity of the construction area, regardless of the source, to the Duty Office via the Virginia Interagency Coordination Center.

5.4 Construction Contractor's Field Safety Officers

The FSOs will be responsible for managing on-site fire suppression documentation, ensuring that fire suppression equipment is available and maintained, ensuring that construction personnel are trained to use equipment properly, and communicating fire hazards and threat levels to construction personnel. Additional responsibilities of the FSOs include:

- reporting all uncontrolled fires within or in the vicinity of the construction area, regardless of source, to the Spread Superintendent, emergency responders, and nearest fire dispatch;
- conducting weekly inspection of tools, equipment, personal protective equipment, and first aid kits;
- developing and maintaining a register of emergency equipment;
- conducting weekly inspections of flammable materials;
- posting "No Smoking" and "Designated Smoking Area" signs and fire rules at appropriate locations within the construction area;
- providing initial response support in the event of a fire and supervising fire suppression activities until relieved;
- providing and gaining approval of site-specific burn and smoke management plans for pre-planned controlled fires that will be implemented in accordance with federal, state/commonwealth, and local requirements;
- providing written burning and blasting schedules, as required, to the appropriate federal, state/commonwealth, and local fire control jurisdiction;
- monitoring construction areas where activities may present safety issues, such as blasting;
- complying with regulatory requirements in the storage and handling of flammable substances and maintaining a registry of flammable substances;
- establishing facilities for on-site chemical management and maintaining Safety Data Sheets (formally known as Material Safety Data Sheets) for flammable materials;
- establishing controls that minimize exposure to flammable materials;
- ensuring that flammable substances are removed from the construction area when not in use or when the location is unattended;
- training and instructing workers in the use, handling, and storage of flammable materials;

- ensuring that construction personnel have been trained in the requirements of this Fire Plan; and
- monitoring compliance with applicable federal, state/commonwealth, and local laws, ordinances, and regulations regarding fire prevention and suppression.

5.5 MVP's and Construction Contractor's Environmental Inspectors

EIs provide environmental regulatory guidance and oversight. This oversight includes fire prevention and suppression within and in the vicinity of construction areas. EIs will be familiar with federal, state/commonwealth, and local rules and regulations pertaining to fire prevention and response. In the event of a fire emergency, EIs will assist with fire suppression.

5.6 Agencies' Authorized Officers (AO)

AOs are representatives from federal land-managing or other agencies who supply information or provide direction regarding potential hazard conditions or changes in prevention methods. AOs may include Interagency Dispatch Centers or staff from land-managing agencies; for the FS, this will be the Duty Officer for the FS. AOs will provide information on current fire danger ratings, the presence of other fires in the vicinity of construction areas, natural disaster warnings, and temporary restrictions on construction activities due to fire or other emergencies at the request of the Spread Superintendent. If extreme fire danger is identified by a land-managing agency, the AO may direct the Chief Inspector or Spread Superintendents to increase the level of fire monitoring, install additional fire prevention or suppression equipment, or stop work, if necessary. The Chief Inspector, Spread Superintendents, FSOs, EIs, AOs, and local fire authorities have the authority to stop or reduce construction activities or operations that pose a fire hazard until appropriate measures are implemented to minimize risk. The FSOs will accompany Spread Superintendents, AOs, or third-party compliance monitors on fire inspections and take corrective action when observing or having been notified that fire protection measures have not been properly installed or maintained.

6.0 EMERGENCY NOTIFICATION

In the event of a fire or other emergency, construction personnel on the scene will notify the appropriate Spread Superintendent and FSO immediately. The Spread Superintendent will be responsible for immediately notifying the appropriate fire dispatch center and AO or land-managing agency, where appropriate. The FSO or another supervisor will coordinate with local emergency responders if additional support is required. In the event of a fire emergency, personnel will contact 911 or the nearest emergency response center. Contact information for emergency responders will be appended to the "issued-for-construction" version of this Fire Plan. A fire emergency is defined as an incident requiring a coordinated response from one or more agencies. When a response is required, the Spread Superintendent or person in charge will communicate the location and extent of the fire and steps underway to control or suppress the fire.

7.0 FIRE DANGER RATINGS

Fire danger ratings based on standard vegetation fuel models will be used by land-managing agencies or local fire authorities to determine required fire prevention, control, and monitoring efforts. Based on the fire danger ratings, certain activities such as blasting, welding, or grinding may be restricted at the discretion of a land-managing agency or local fire authority. Additionally, the land-managing agency or local fire authority may modify or change requirements based on changes in fire restriction notices or localized hazards or risks. Standard practice Industrial Fire Protection Levels are:

- Closed Season, when fire season requirements are in effect;
- Partial Shutdown, which prohibits activities except as indicated by the State/Commonwealth; and
- General Shutdown, when all operations are prohibited.

For federal Lands, fire danger ratings and associated precautions relevant to the Project include:

- No Fire Restrictions – normal fire precautions.
- "Planning Levels 2 or 3" Fire Restrictions – normal fire precautions, except that designated smoking areas and permits for burning are required.
- "Planning Level 4 or 5" Red Flag Warning – special fire precautions including:
  - Extra precautions are required such as designating a fire watch, using a spark shield, or wetting work areas down prior to active construction.
  - Machine treatment of slash, skidding, yarding, blasting, welding, metal cutting, and offloading are subject to land-managing agency requirements.
  - No slash burning is allowed.
  - Power saws must be shut down from 1:00 p.m. to 8:00 p.m. local time.
  - Hauling trucking must stay on the right-of-way or surfaced roads after 6:00 p.m. local time.
  - Additional personnel, equipment, and prevention measures are required.
- "Planning Level 5" Fire Restrictions – special fire precautions including:
  - All restrictions listed above.
  - Shutdown of all construction activities except operations on soil or graded areas, watering, grading, trench excavation, padding, backfilling, and clean-up.
  - Activities such as blasting and welding require an exemption from the AO unless these activities are completed on the graded portions of the right-of-way.

State/Commonwealth and local fire agencies may authorize their own restrictions within jurisdictions for private lands. Requirements identified in agency-issued fire restrictions will be followed at all times.

The FSOs will contact the appropriate federal, state/commonwealth, or local fire management office to obtain information on fire danger ratings. Contacts will be daily when conditions are favorable for fires and weekly at other times. The FSOs will communicate the fire danger ratings to the Chief Inspector, Spread Superintendents, Facility Superintendents, EIs, and construction crews.

8.0 FIRE PREVENTION

8.1 Blasting

Procedures for blasting are discussed in MVP's *Blasting Plan.* Additional measures to be implemented in blasting areas are described below. When fire danger is high, a two-person fire watch will patrol the blast area for a period of one hour after the completion of blasting. If blasting occurs when the fire danger rating is "Planning Level 2 or 3," an FSO will be on site during the operation and remain on site for one hour after the completion of blasting. At least one Size 0 or larger shovel and one water-filled backpack pump or fire extinguisher will be on site. In addition, a fire watch will be assigned to each crew utilizing blasting equipment. When the fire danger rating is "Planning Level 4 or 5" or "Planning Level 5," blasting will be prohibited unless an exemption is granted by the local fire authority. If an exemption is granted, additional fire prevention equipment and personnel will be on site prior to blasting. Equipment may include water trucks, fire tankers, shovels, backpack pumps, bulldozers, etc. A fire watch will remain on site for at least two hours after the completion of blasting activities.

8.2 Welding

During closed season, when fire season requirements are in effect, welding, cutting, or drilling of metal components of the Project will require the approval of the Spread Superintendent and the Chief Inspector. In areas where approval has been granted, vegetation will be cleared at a minimum diameter of 30 feet around the center of the work area unless the area has been watered to eliminate the fire danger. Each welding crew will be outfitted with at least one Size 0 or larger shovel, one water-filled backpack pump, and one five-pound dry powder ABC fire extinguisher.

When the fire danger rating is "Planning Level 2 or 3," a fire watch will be assigned to each crew utilizing cutting and welding equipment. The fire watch will remain on site for one hour after the completion of welding activities.

When the fire danger rating is "Planning Level 4 or 5", an exemption by the AO will be required prior to welding activities unless the activities are performed within the graded portions of the right-of-way or other work areas. If an exemption is granted, all "Planning Level 2 or 3" measures will be implemented. In addition, a water tanker and bulldozer will be required to be on site during welding operations, and a fire watch will remain on site for at least two hours after the completion of welding activities.

When the fire danger rating is "Planning Level 5," welding activities will require approval from the AO. If an approval is granted, all "Planning Level 2 or 3" and "Planning Level 4 or 5" measures will be implemented. Fire restriction measures also apply to welding operations performed for equipment maintenance. All welding activities require a permit from the jurisdictional agency as per 29 CFR Part 1910 Subpart Q (welding) and 29 CFR Part 1910 Subpart I (personal protective equipment).

8.3 Equipment

The construction contractor will develop a list of equipment to be used during construction. Equipment used in the construction area may be inspected by the AO or other third-party compliance monitor prior to use on the Project. The equipment may be used only while in good operating order.

8.3.1 Fire Extinguishers

The FSAs will inspect fire extinguishers on a monthly basis to verify that:

- each extinguisher is in its designated place, clearly visible, and not blocked by equipment or other objects that could interfere with access to the fire extinguisher during an emergency;
- the nameplate with operating instructions is legible and facing outwards;
- the pressure gauge is showing that the extinguisher is fully charged;
- the pin and tamper seal are intact; and
- the extinguisher is in good condition, showing no signs of physical damage, corrosion or leakage.

The FSO performing the monthly inspection will initial and date each extinguisher inspection tag. Defective units will be taken out of service and replaced immediately. Fire extinguishers will be used in accordance with 29 CFR § 1910.157. Use of fire extinguishers by construction personnel to suppress fires will only be undertaken if:

- the fire is small and is not spreading to other areas;
- escaping the area is possible;
- the fire extinguisher is in working condition, and the individual understands how to use it; and
- the fire extinguisher has been professionally inspected and tagged annually.

8.3.2 Spark Arrestors

Spark arresters used for portable equipment, such as chainsaws, will be in good working condition. Light trucks and cars with factory-installed or equivalent mufflers, in good condition, may be used on roads where the roadway is cleared of vegetation. Vehicles equipped with catalytic converters, modern diesel engines with "regeneration systems," or diesel particulate filters are potential fire hazards. These vehicles will be inspected and cleaned, as necessary, and parked on areas cleared of vegetation. All vehicles operating in vegetation-covered areas will maintain clean and clear undercarriage and

exhaust systems, with no chaff, grass, or brush lodged in the exhaust system and skid plates. Cross-country driving outside designated work areas will be prohibited.

8.3.3 Equipment Parking and Storage

Equipment parking areas and small stationary engine sites will be cleared of all extraneous flammable materials. Gas and oil storage areas will be cleared of extraneous flammable material, and "No Smoking" signs will be posted within these areas. All used and discarded oil, oil filters, oily rags, or other waste will be disposed of in approved and marked containers. Containers will be stored in approved locations and removed from the site by licensed contractors or approved personnel and disposed of or recycled at approved facilities. Glass containers will not be used to hold gasoline or other flammable materials.

8.3.4 Power Saws

All gasoline-powered saws will be provided with approved spark arresters/mufflers and maintained in good operating condition. Chainsaw operation will comply with the following:

- the arrester/muffler will contain a 0.023-inch mesh, stainless-steel screen;
- chainsaw operators will have available either (1) a fire extinguisher or (2) water backpack and shovel;
- chainsaws will be moved at least 10 feet from the place of fueling before starting; and
- chainsaw fuel and oil will be carried in safety cans designed for that purpose.

8.4 Warning Devices

Highway flares or other devices with open flames will not be allowed in the construction area because of the danger for fire. Contractors will only use electric or battery-operated warning devices within the construction area. These detectors will provide a distinctive and recognizable signal to ensure timely evacuation from the area of fire or to perform actions designated by this plan or by the FSO. The FSO will test smoke detectors to ensure their safe operation.

8.5 Warming and Cooking Fires

Warming and cooking fires will be prohibited on the right-of-way.

8.6 Smoking

Smoking is allowed only in areas designated by the FSO. Smoking signs visible to all personnel will be posted at designated areas. The supervisory personnel will be responsible for enforcing smoking restrictions. "No Smoking" signs will be posted in all refueling areas and in areas where flammable materials are used, stored, or discarded.

8.7 Refueling

All fuel trucks will be equipped with a 35-pound minimum ABC fire extinguisher. Storage areas will be cleared of all extraneous flammable materials. All discarded oil, oil filters,

oily rags, or other potentially flammable wastes will be disposed of or as described in Section 8.3.3 above. Only approved and properly maintained containers will be used to store or transport flammable liquids.

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

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.