

# 11 – Wildland/Urban Firefighting

## Introduction

A wildland-urban interface exists where community-defined values, structures, watersheds, roads and highways, power and gas lines, or other community resources intermingle with wildland fuels, and may be threatened by wildland fires. Wildland fires in these areas are often multi-jurisdictional and multi-agency. This complexity combined with wildland fire, public safety, increased media attention, political pressures, and other factors, may combine to overwhelm a normal size-up and decision-making process. The potential exists in areas of wildland/urban interface for extremely dangerous and complex fire burning conditions.

## Policy

The operational roles of the agencies in the wildland/urban interface are wildland firefighting, hazardous fuels reduction, cooperative prevention and education, and technical assistance. Structural fire suppression is the responsibility of tribal, state, or local governments. Federal agencies may assist with exterior structural protection activities under formal Fire Protection Agreements that specify the mutual responsibilities of the partners, including funding.

## Protection Agreements and Planning

Managers must incorporate wildland/urban interface considerations into all agreements, operating plans, and land and fire management plans, to ensure that all interface areas are covered and state and local responsibilities are apportioned appropriately.

### *BLM –*

- Bureau of Land Management (BLM) resources will not be planned, nor dispatched, as a normal response for structure or vehicle fires, except in those cases where these fires pose a significant threat to BLM-administered lands. In these situations, resources should only be used in wildland protection. Actions will be limited to the exterior of the structure or vehicle unless there is an immediate threat to human life.
- No BLM employee will respond to a structure or vehicle fire prior to receiving required training in hazard awareness and unique safety considerations associated with structure and vehicle protection. A local fire department with responsibility for structure and vehicle fire protection may provide this training.
- BLM employees, in interagency dispatch centers, should not provide dispatch services for cooperating agencies with structure fire, vehicle fire, or emergency medical responsibility, unless (1) a current interagency agreement is in effect, (2) BLM personnel have been trained in local emergency dispatch procedures, and (3) the BLM employee has a delegation of authority for those activities outside the normal scope of the BLM. In these instances, BLM employees will be acting as agents of that agency and will only communicate information contained in that agency's dispatch plan or as directed by an official from that agency.

- The minimum hose diameter for vehicle fires is 1.5 inches when using foam in wildland/urban interface and vehicle fire situations.

**FWS** – Structural firefighting is not our functional responsibility. We should only perform assistance in structure protection on an emergency basis to save lives. Our fire personnel may assist in protecting wildlands around structures or protecting the structure's exterior from approaching fire when we can accomplish such action safely. We will make our fire personnel aware of safety hazards associated with suppression activities around structures and transportation systems.

- Do not knowingly place employees in a position where exposure to noxious gases or chemicals or other situations require the use of self-contained breathing apparatus.
- Cooperative agreements will not commit our personnel to structural fire suppression.

**NPS** – The NPS has structural fire suppression authority and responsibilities on lands it administers. Only personnel with proper training and equipment will be assigned interior structure suppression duties, per DO-58. NPS wildland firefighters without the required structural training, PPE, and equipment are limited to exterior or exposure protection of buildings in wildland fire situations.

***NPS-Vehicle Fire Response Requirements for Wildland Firefighters.***

Vehicle fires including single-passenger vehicles are common types of fires encountered by firefighters. These fires contain a high level of toxic emissions and must be treated with the same care that structural fires are treated. Firefighters must be in full structural fire personal protective clothing including self-contained breathing apparatus.

Situations exist during the incipient phase of a vehicle fire where the fire can be quickly suppressed with the discharge of a handheld fire extinguisher. Discharging a handheld fire extinguisher during this phase of the fire will normally be considered an appropriate action. If the fire has gone beyond the incipient stage, employees are to protect the scene and request the appropriate suppression resources.

If firefighters are directed, dispatched, (including self-dispatching) to structural fires, including vehicle fires, they must be provided with the required personal protective equipment, fire fighting equipment and training.

In order to protect the health and safety of National Park Service personnel, no employee shall be directed, dispatched, (including self-dispatching) to the suppression of vehicle fires unless they meet or exceed the following standards and regulations. The use of personal protective equipment and self-contained breathing apparatus are governed by adherence with the following Director's Orders, standards and regulations:

- Directors Order #58, Structural Fire
- NFPA 472 (1997) – Standard on Professional Competence of Responders to Hazardous Materials Incidents

- NFPA 1001 (1997) – Standard for Firefighter Professional Qualifications
- NFPA 1971 (2000) – Standard on Fire Protective Ensemble for Structural Fire Fighting
- NFPA 1404 (1996) – Fire Department Self-Contained Breathing Apparatus Program
- NFPA 1500 (1997) – Fire Department Occupational Safety and Health Program
- 29 CFR 1910 & 1926 (Respiratory Protection Final Rule) and OSAH 29 CFR 1910.134 (Respiratory Protection)

**Training.** Firefighters being dispatched to suppression of vehicle fires require:

- Compliance with OSHA 29 CFR 1910.134 (This information is taught in Unit 5 of the structural fire training course and will require approximately 3 hours).
- Compliance with NFPA 1971 Standard on Protective Ensemble for Structural Fire Fighting (This information is taught in Unit 4 of the structural fire training course and will require approximately 1 hour).
- Documented instruction by a certified fire instructor on the strategy, tactics and safety requirements in suppression activities related to vehicle fire suppression. This training does not include rescue and extrication. (This information is taught in Unit 19 of the structural fire training course and will require approximately 3 hours).

Funding of the training required to suppress vehicle fires should be provided by the benefiting accounts.

**Medical examinations.** Medical Requirements for Fire Fighters (NFPA 1582). Medical requirements include respiratory testing and some other components not included in the wildland fire medical examination.

**Physical fitness.** Same as National Park Service wildland fire requirements for arduous duty.

#### **USFS –**

**FSM-5137 – Structure Fires.** Structure fire protection activities include suppression of wildfires that are threatening improvements. Exterior structure protection measures include actions such as foam or water application to exterior surfaces of buildings and surrounding fuels, fuel removal, and burning out around buildings.

**FSM-5137.1 – Structure Fire Protection From Advancing Wildfires.** The Forest Service's primary responsibility is to suppress wildfire before it reaches structures. The Forest Service may assist state and local fire departments in exterior structure fire protection when requested under terms of an approved cooperative agreement.

**FSM-5137.2 – Structure Fire Suppression.** Structure fire suppression, which includes exterior and interior actions on burning structures, is the responsibility of state, tribal, or local fire departments.

Forest Service officials shall avoid giving the appearance that the agency is prepared to serve as a structure fire suppression organization.

Forest Service employees shall limit fire suppression actions to exterior structure protection measures as described in *Section 5137*.

**FSM-5137.3 – Structure Fire Protection and Suppression for Forest Service Facilities.** At those Forest Service administrative sites, outside the jurisdiction of state and local fire departments, limit fire protection measures to prevention, use of fire extinguishers on incipient stage fires (*FSH 6709.11, Sec. 6-4c*), safe evacuation of personnel, containment by exterior attack, and protection of exposed improvements.

At Forest Service administrative sites located within the jurisdiction of state and local structural fire departments, structure fire suppression responsibility must be coordinated with state and local fire departments.

**FSM-5137.4 – Vehicle and Dump Fires.** Do not undertake direct attack on vehicle or dump fires on National Forest System lands unless such action is absolutely necessary to protect life or prevent the spread of fire to the wildlands.

For additional fire service and homeowner information regarding wildland/urban fire refer to FIREWISE.ORG on the Internet.

### **Respiratory Protection**

Any use of respiratory protection (e.g., dust masks, half-mask respirators, self-contained breathing apparatus-SCBA, etc.) must be in compliance with agency safety and health regulations (BLM 1112-2) and OSHA's Respiratory Protection Standard (29 CFR 1910.134).

**BLM** – Only employees trained and qualified to use SCBAs and permanently assigned to states with an approved SCBA Program are authorized to use SCBAs. When these employees are operating outside their state, the host State Director must authorize the use of SCBAs.

**USFS – FSM- 5135.3 – Self-Contained Breathing Apparatus.** Wildland firefighters may deploy only an open-circuit, self-contained breathing apparatus (SCBA) of the positive pressure type when smoke from vehicle, dump, structure, or other non-wildland fuel fire cannot be avoided while meeting wildland fire suppression objectives (*29 CFR 1910.134, Respiratory Protection*). If such an apparatus is not available, avoid exposure to smoke from these sources.

The acquisition, training, proper use, employee health surveillance programs, inspection, storage, and maintenance of an SCBA must comply with the national Fire Protection Association Standard, NFPA-1981 and *29 CFR*

1910.134I, and be justified by a Job Hazard Analysis. Where an SCBA is approved, it may be carried only on a fire engine and its use must be consistent with *FSM 5130.2* and *FSM 5130.3*.

## Wildland/Urban Interface Watch Outs

Checklists are provided in Appendices and the *Incident Response Pocket Guide* for safe and efficient responses and operations. The primary considerations are firefighter safety and public safety.

**Appendix W:** Wildland Urban Interface

**Appendix X:** Structure Triage

**Appendix Y:** Structure Go/No-Go Reference

**Appendix Z:** HazMat IC Checklist

## Hazardous Materials

### Hazardous Materials Response Requirements For Wildland Firefighter

All emergency service personnel are required to be trained in hazardous materials response. There are several levels of hazardous materials training including “first responder awareness,” “first responder operations,” and “technical.” This section addresses the “first responder awareness” and “first responder operations” level only.

First responder awareness and first responder operations levels shall receive training to meet applicable United States Department of Transportation (DOT), United States Environmental Protection Agency (EPA), Occupational Safety and Health Administration (OSHA), NFPA 472 Standard on Professional Competence of Responders to Hazardous Materials Incidents, and other appropriate state, local, or provincial occupational health and safety regulatory requirements. This training is offered in many locations and requires approximately 8 hours.

First responders at the awareness level are those persons who, in the course of their normal duties, could be the first on the scene of an emergency involving hazardous materials. First responders at the awareness level are expected to recognize the presence of hazardous materials, protect themselves, call for trained personnel, and secure the area.

First responders at the operational level are those persons who respond to releases or potential releases of hazardous materials as part of the initial response to the incident for the purpose of protecting nearby persons, the environment, or property from the effects of the release. First responders at the operational level are expected to respond in a defensive fashion to control the release from a safe distance and keep it from spreading. Training for the operational level requires approximately 24 hours.

See **Appendix Z** for HazMat Checklist

*USFS –FSM-5135.2 – Hazardous Materials.* Limit actions of Forest Service personnel on incidents involving hazardous material to those emergency measures necessary for the immediate protection of themselves and the public. If the material is a health and safety hazard requiring special

measures for control and abatement, promptly notify the appropriate public safety agencies. Provide training in hazardous materials recognition and avoidance to employees whose exposure to such materials is likely (*FSM 2160*).