

Oregon OSHA Proposed Changes
Division 2/L, Fire Protection
March 2005

Key: New/added text is in **bold and underlined**.
Repealed/removed text is in [~~brackets and lined through~~].

437-002-0182, Oregon Rules for Fire Fighters

...

(10) Fire Fighting Training and Education.

...

(c) When live fire training occurs, it [~~shall~~] **must** be conducted under the direction of the fire department training officer, or employer authorized representative. All live fire training [~~shall~~] **must** be conducted [~~pursuant to General Requirements for Live Fire Training established by the State Fire Marshal under OAR 838-10-070(3)(b),(c) and (d), EXCEPT as follows or equivalent:]~~ **following the requirements of Appendix C of this standard.**

[~~Exceptions to the State Fire Marshal's Live Fire Training regulations:]~~

[~~(A) OAR 838-10-070(3)(b)(G) and (H) shall not apply;~~]

[~~(B) OAR 838-10-070(3)(c)(B), governing Water Supply, shall not apply. Instead, the following provisions shall govern water supply:]~~

[~~(i) Sufficient backup lines shall be provided to ensure adequate protection for personnel on training attack lines.]~~

[~~(ii) The instructor in charge of the live fire training evolutions shall determine, prior to each specific evolution, how many training attack lines and backup lines will be necessary. The instructor in charge shall then:]~~

[~~(I) Assign one instructor to each "backup line";]~~

[~~(II) Assign sufficient additional personnel to "backup lines" to provide mobility; and]~~

[~~(III) Assign one additional instructor for each additional functional assignment.]~~

[~~(iii) The water supply for live fire training shall be a total sustained water supply in gallons as calculated utilizing the Iowa formula of fire area length, times width, times height divided by 100 and multiplied by 30.]~~

[~~Length x Width x Height x 30]~~

[~~100]~~

[~~The required water supply shall be increased by 25 percent for each side of the structure which has an exposure to another structure under 50 feet away.]~~

~~[Any time the total available water supply drops below 50 percent of the required available supply all interior fire fighting operations shall cease.]~~

~~[(iv) Separate sources shall be utilized for supply of attack lines and backup lines in order to preclude the loss of both water supply sources at the same time.]~~

Appendix C

Minimum Requirements for Live Fire Training

This is a mandatory appendix as required by

OAR 437-002-0182(10)(c)

The following requirements must be met prior to live fire training:

Training:

___ **All personnel are trained to the requirements of DPSST Entry level firefighter or the educational requirements of the assigned position;**

or

___ **Participants who have received training from another department or jurisdiction have provided written documentation that they meet the requirements of DPSST.**

___ **Instructors are adequately trained to appropriately perform their tasks.**

Pre-Burn planning for acquired structure:

A written plan:

___ **Is prepared by the Chief, or their designee.**

___ **Will be maintained for 1 year, or until the next live fire exercise (whichever is longer).**

___ **A pre-burn briefing has been conducted with all personnel involved in the exercise including:**

___ **A walk through of the structure, with an emphasis on exits.**

___ **A discussion of the evacuation plan, including any signals for evacuation.**

___ **Methods of communication i.e., radio channels.**

____ Where to locate medical treatment, rehab, and the safety officer or Incident Command (I C).

____ Any limitations of the exercise or hazards that cannot be removed, but are protected.

____ Personal protective equipment that is required.

____ Personal protective equipment that is available (must include all required PPE).

____ Adequate first aid treatment is available for injuries.

____ No personnel will be allowed to simulate a victim in live fire exercises.

____ No fire will be set that will intentionally block an exit.

____ Adequate food and fluids is available, as well as protection from extreme weather conditions.

Structure Considerations:

Acquired Structures:

____ Remove or contain all hazardous materials.

____ Remove combustible material not intended for use in the training.

____ Remove oil tanks or similar containers, or protect them in such a way as to prevent explosion or over pressure.

____ Only one fire is allowed inside a structure at a time.

____ Remove or repair hazardous structural conditions to not pose a hazard to personnel.

____ Disconnect all utilities to the training structure.

____ Remove or protect utilities adjacent to the training structure prior to live fire training.

____ Remove extraordinary weight overhead and/or debris in the training area that poses a hazard to personnel.

____ Protect or remove adjacent buildings and/or property.

- ___ All forms of asbestos have been addressed as per Division 2, Subdivision Z, OAR 1910.1001.
- ___ Remove all environmental hazards, such as toxic weeds, insects, or vermin that could pose a hazard to personnel have been removed.
- ___ Remove vegetation that poses a threat.
- ___ Personnel exposed to on-road vehicle traffic will wear highly visible upper body garments that comply with OAR 437-002-0128.
- ___ An inspection has been made by the Chief or their designee prior to the live fire exercise to ensure the provisions of this and all applicable standards are met.
- ___ Permanent Burn Structures:
Buildings used for training burns have been visually inspected by a qualified person prior to evolutions.
- ___ Any damage that poses a hazard has been corrected.
- ___ All equipment used in live fire training buildings has been inspected, and repaired if necessary, prior to use.
- ___ All equipment is operated by a qualified person.
- ___ A designated parking area is established for apparatus not used in the training.
- ___ Follow traffic control requirements of OAR 437-002-0223(23)(c) if personnel are exposed to on-road vehicle traffic.
- ___ Keep persons not directly involved with the training behind designated fire lines.
- ___ Exterior Props:
Areas around props are free of obstructions or vegetation that pose a hazard.
- ___ Props have been visually inspected by the Chief or their designee prior to the live fire exercise.
- ___ Defects have been repaired prior to use.
- ___ Vehicles used for live fire training:

____ All containers on or in the vehicle that contain flammables, oxidizers, or other gases are emptied or ventilated to prevent explosion or unexpected burning.

____ All batteries are removed.

____ Equipment and material is secured to prevent unexpected movement.

____ All split rims have been removed prior to ignition.

Water Supply:

____ The Chief or their designee has documented the minimum water supply necessary based on the criteria identified in NFPA 1142 Standard on Water Supplies, 2001 edition.

____ A reserve of 50 percent of the documented fire flow is available to protect surrounding structures.

____ Separate sources of water will be maintained for attack lines and backup lines.

____ Hydrants that will supply backup lines are identified and gated.

____ Areas around the structure will be maintained clear of non essential equipment or personnel to allow for ease of deployment of hose lines.

Fuels:

____ Use only fuels with known burning characteristics that are readily identifiable.

____ Maintain fuel load at a level that is controllable and readily predictable.

____ Do not use flammable or combustible liquids unless the structure has been specifically designed to use those liquids as fuel.

____ The Chief or their designee has certified the fuel load and any factors that would affect growth, development, or spread of fire in each room of the structure being burned prior to live fire evolutions.

____ Immediately halt training if any hazard is noted.

Ignition Sources:

____ Use matches, fusees, or a drip torch to ignite an acquired structure.

___ Use matches, fusees, a drip torch, or flammable gas to ignite a permanent burn structure.

___ Other ignition/fuel sources (with known characteristics) are used only for arson investigation and fire-cause determination training when:

___ The attack and back-up plans take into consideration the ignition/fuel source in providing for continued safety of all personnel.

___ Live fire training activities are limited to back-up, control, and extinguishing the fire.

ICS:

___ Established and maintained an ICS in accordance with OAR 437-002-0182(8).

___ Establish and maintain accountability in accordance with OAR 437-002-0182(9).

___ Establish and maintain a safety officer, independent from the IC (and not given other assignments) until the training is concluded.

___ Authorize the safety officer to halt the exercise at any time and for any reason.

___ All injuries investigated by the Chief or their designee.

___ Halt training in cases of extreme weather.

___ Adequately train the safety officer for the position.

___ The safety officer may assign additional personnel in and around the structure to ensure the safety of personnel.

___ Only one ignition officer is designated who reports directly to the safety officer.

___ The ignition officer has a charged hose line when igniting the structure.

___ Ignition takes place under the direct supervision of the safety officer.

Personal Protective Equipment:

___ Appropriate PPE, in accordance with OAR 437-002-0182, is worn by all participants, including instructors.

- ___ **Inspect all PPE for proper fit and maintenance prior to entering the structure.**
- ___ **Wear SCBA in accordance to OAR Division 2, Subdivision I, 1910.134.**
- ___ **Use hearing protection in accordance with OAR Division 2, Subdivision G, 1910.95.**