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| **Life Safety Rope, Harnesses and Hardware** | Related Policies: | |
| *This policy is for internal use only and does not enlarge an employee’s civil liability in any way. The policy should not be construed as creating a higher duty of care, in an evidentiary sense, with respect to third party civil claims against employees. A violation of this policy, if proven, can only form the basis of a complaint by this department for non-judicial administrative action in accordance with the laws governing employee discipline.* | | |
| Applicable KY Statutes:  Applicable KY Regulations: 803 KAR 2:015; 803 KAR 2:412 | | |
| OSHA: 29 CFR 1926.502, Fall Protection Systems Criteria and Practices | | |
| NFPA Standard: 1500 Ch. 7.17, 1670, 1983 | | |
| Date Implemented: | | Review Date: |

1. **Policy**: All life safety rope, harnesses and hardware used by the fire department shall comply with NFPA 1983, and all operations involving the use of life safety rope shall be conducted in accordance with NFPA 1500 and NFPA 1670, and OSHA’s Standard on Fall Protection Systems Criteria and Practices, 29 CFR 1926.502.
2. **Purpose:** To establish guidelines for the care, maintenance, inspection and use of life safety ropes, harnesses and hardware.
3. **Scope:** This Standard Operating Procedure applies to all mem­bers of the department.
4. **Definitions**

**Life Safety Rope:** Rope dedicated solely for the purpose of con­structing lines for supporting the weight of members or others during rescue, firefighting, other emergency operations, or during training evolutions.

**Utility rope:** Rope used to hoist, lower or secure firefighting equipment. Utility rope shall not be used to support the weight of any members or other persons.

**Line:** Rope when in use.

**Life Safety Harness.** Harness used to support people during fire department operations.

**Class I Harness:** Harness that fastens around the waist; de­signed to be used for securing member to a ladder or aerial device. (E.g. ladder belt) Designed for one-person loads.

**Class II Harness:** Harness that fastens around waist and around thighs or under buttocks: designed for rescue where two person loads may be encountered.

**Class III Harness:** Harness that fastens around waist, around thighs or under buttocks, and over shoulders; designed for rescue where two person’s loads may be encountered and inverting may occur.

**Remove from service and destroy:** Remove from service and alter in such a way that the rope cannot be mistakenly used as a life safety rope. This shall include disposal of the rope or cutting the rope into sections not longer than 15 feet in length. This rope may then be used for training in knot tying.

**Impact Load:** Any sudden load placed on the rope that would cause the rope to be momentarily stressed beyond the limits recommended by the manufacturer. Where the manufacturer’s impact load recommendations are unclear assume any free-fall of a member greater than 2 vertical feet that is caught by the rope is an impact load for purposes of assessing whether a rope can be reused.

1. **Specifications**
2. All life safety rope, harnesses and hardware shall meet or exceed NFPA Standard 1983, *Standard on Life Safety Rope and Equipment for Emergency Services*, and OSHA’s Standard on Fall Protection Systems Criteria and Practices, 29 CFR 1926.502.
3. The life safety rope used by the fire department shall have a minimum tensile strength of 12,500-pounds. This rope is consid­ered to be a two person rope (300 pounds per person x 2 persons plus at least a 15:1 safety margin) and shall not be used to support more than two persons.
4. Only Class II and Class III harnesses may be used during emergency operations and training evolutions when working with life safety rope.
5. Personnel working from open-sided unguarded floors, roofs, pipe racks, ledges, platforms, walkways, machinery, stock shelves, or similar unguarded working surfaces which are elevated ten (10) feet or more above a lower level shall be secured by life safety harnesses, rope, and hardware; a fall protection system; or shall be protected by some other suitable method to the greatest extent possible given the exigencies of the emergency unless it is infeasible or creates a greater hazard to use such a measure.
6. **Rope for Emergency Response**
7. Life safety rope shall only be utilized by personnel trained and approved by the fire department in high and/or low angle rope rescue operations.
8. Use of life safety ropes at emergencies shall be in accordance with NFPA 1670 and 29 CFR 1926.502.
9. Only life safety rope shall be used to support the weight of members or other persons during rescue, firefighting or other emergency operations.
10. ­Life safety rope is only to be used for emergency life saving operations. Life safety rope used for any other purpose (such as for a utility rope, or for lifting, hauling, or lowering equipment) shall be removed from service and destroyed.
11. Life safety rope intended for emergency response is not to be used for training evolutions.
12. Life safety rope used for rescue at fires or other emergency incidents may be re-used, if inspected before and after each use in accordance with the manufacturer's instruc­tions and provided:
13. The rope has not been visually damaged by exposure to heat, direct flame impingement, chemical exposure or abrasion.
14. The rope has not been subjected to any impact load.
15. The rope has not been exposed to chemical liquids, solids, gases, mists or vapors of any material known to deterio­rate rope.
16. If the rope used for rescue at fires or other emergency incidents has been subjected to (a), (b) or (c) of paragraph (4) above, or if the rope fails the visual inspection, it shall be removed from service and destroyed. If there is any question regarding the serviceability of the rope after consideration of the above, the safe course of action shall be taken and the rope shall be removed from service and destroyed.
17. Life safety rope that is **ten** years old shall be removed from service and destroyed.
18. When life safety rope is placed into service the bag shall be tagged, and the following information shall be included on the Tag:
19. Purchase date
20. Manufacturer
21. Rope specifications
22. Dates of inspection
23. This information shall also be maintained in the company files on Life Safety Rope Log forms.
24. A separate Log form shall be maintained for each life safety rope.
25. The officer in command of the unit or division to which the life safety rope is assigned shall be responsible for maintaining the log.
26. Life safety rope shall be inspected every six months, in April and October, and before and after any use. Each inspection shall be noted on the rope's tag as well as in the Life Safety Rope Log.
27. All life safety harnesses and hardware shall also be in­spected every six months, in April and October, and before and after each use.
28. **Training Life Safety Rope**
29. Life safety rope designated for training evolutions shall be designated as training life safety rope. Training life safety rope shall not be used at emergency incidents.
30. Training life safety ropes are considered to be used under controlled conditions in which impact loading and other damaging situations would be observed. Training life safety rope may be reused if inspected before and after each use in accordance with the manufacturer instructions and provided:
31. The rope has not been visually damaged by exposure to heat; direct flame impingement, chemical exposure or abrasion;
32. The rope has not been subjected to any impact load:
33. The rope has not been exposed to chemical liquids, solids, gases, mists or vapors of any material known to deterio­rate rope.
34. If training life safety rope has been subjected to (a), (b) or (c) of paragraph (2) above, or if the rope fails the visual inspection, it shall be removed from service and destroyed. If there is any question regarding the serviceability of the rope after consider­ation of the above, the safe course of action shall be taken and the rope shall be removed from service and destroyed.
35. Training life safety rope that is ten years old shall be removed from service and destroyed.
36. A Life Safety Rope Log shall be maintained for each training rope indicating:
37. Purchase date
38. Manufacturer
39. Specifications
40. Dates of use
41. Type and number of evolutions performed
42. Dates of inspection
43. The officer in command of the unit or division to which the training life safety rope is assigned shall be responsible for maintaining the log.
44. Training life safety ropes shall not be stored upon apparatus or in any location where it may mistakenly be used for emergency response.
45. Training life safety rope shall be inspected every six months, in April and October, and before and after any use. Each inspection shall be noted on the Life Safety Rope Log.
46. All life safety harnesses and hardware used for training shall also be in­spected every six months, in April and October, and before and after each use.
47. **Care Maintenance and Storage**
48. Never allow a life safety rope to be stepped on. Stepping on rope grinds in dirt that can abrade the core fibers causing premature wear.
49. Always protect the rope from sharp edges. The majority of rope failures are a result of inadequate edge protection.
50. Rope should always be kept clean and stored in a rope bag in a cool, dry place out of sunlight or fluorescent lights, and free from contact with chemicals.
51. Rope should be stored away from exhaust fumes, battery acid fumes and gasoline fumes.
52. Ropes may be cleaned in accordance with manufacturer in­structions.
53. **Inspections**
54. All life safety ropes shall be inspected by qualified personnel in accordance with the manufacturer's instructions.
55. Life safety ropes shall also be subjected to a visual and tactile examination, consisting of the following:
56. Physically pass the entire rope, end to end, through both hands, feeling for any depressions, dimples, lumpiness, or irregularities.
57. Any defects found shall be cause to have the rope removed from service and destroyed.