

# LOUISVILLE FIRE PROTECTION DISTRICT

## *Fire Protection Program Plan*



**“Our Family Serving your Family Since 1871”**

**EFFECTIVE: 3-26-07**

**APPROVED: Tim Parker, Chief of Department**

# Life Safety And Fire Prevention Division Fire Protection Program Plan

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## **1.0 Definitions**

1.1	Louisville Fire Protection District	LFPD
	Life Safety and Fire Prevention Division	LSFPD
	International Fire Code	IFC
	National Fire Protection Association	NFPA

## **2.0 Overview of the Prevention Bureau**

- 2.1 The Life Safety and Fire Prevention Division (LSFPD) is primarily responsible for enforcing all aspects of the International Fire Code (IFC), which was adopted by the Louisville Fire Protection District (LFPD) Board of Directors on November 13, 2003. The IFC addresses new & existing construction. The 2007 editions of NFPA 101 Life Safety Code & NFPA 1 Fire Prevention Code are used as references by LSFPD. In addition to the IFC, the LSFPD enforces specifications for the installation of fire protection systems including fire alarms, sprinklers, standpipes, fire hydrants and fire lanes. This document also outlines the department's fire protection program plan, which guides implementation of the community's fire defense program.

The LSFPD has responsibilities in the following areas as provided for by the State of Colorado, Boulder County, City of Louisville and LFPD regulations:

- Engineering
- Plan Reviews and Practices
- Site Plan Reviews
- Preliminary Building Plans
- Final Building Plans and Specifications
- Certificates of Occupancy
- Fire Inspections
- Enforcement
- Fire Cause and Determination
- Miscellaneous Services
- Permit Fees
- Acceptance Testing of New & Modified Extinguishing and Special Hazard Systems

- Fire Safety Education

### **3.0 Engineering**

3.1 This includes plan reviews for new construction and building renovations to ensure buildings are constructed according to the fire code and they include the proper fire protection features. Plan reviews begin with a site plan to ensure proper access to the site, etc. The next phase involves reviewing the plan for proper construction, exits, lighting and fire protection systems. Finally, various inspections are conducted during the construction of the project to ensure the building is actually being built in accordance with the approved plans.

### **4.0 Plan Review and Practices**

4.1 The review of building plans and specifications provides the fire department with its best opportunity to make sure that fire protection standards are met before construction is completed and the building is occupied. The type and depth of the review process depends on the community's needs and the functions of other local departments and state agencies with review authority.

4.2 Whenever possible, the LSFPD participates in pre-construction meetings with other code officials, project architects, engineers and contractors. The LSFPD addresses questions relating to fire protection features in the planned building(s), the building code and fire prevention code requirements. The LSFPD comments during the plan review process.

4.3 Discussing the effect of construction on fire & life safety at these meetings can prevent misunderstandings and conflicts that may arise during construction or the final finished phase. The LSFPD can emphasize fire safety code requirements and coordinate responsibilities with other code enforcement officials. We believe design professionals and contractors benefit from this procedure as well since problems that would otherwise cost them time & money are eliminated prior to construction.

### **5.0 Site Plan Reviews**

5.1 The site plan review provides the LSFPD with the first look at new construction and/or additions to existing buildings. It is an overview of the intended construction in relation to existing conditions.

The site plan includes information on building placement, exposures, type of construction, size, occupancy, water supply (from both public & private mains), hydrant placement and access. It may also contain information about existing conditions that must be modified, such as abandoned flammable liquid tanks or pipelines in the area. The contour of the land, current and projected uses of adjoining properties, including zoning, should also be reviewed at this time.

## **6.0 Preliminary Building Plans**

- 6.1 The review of preliminary building plans gives the LSFPD an opportunity to comment on those features of the building that significantly affect life safety and protection of the building from fire. The depth and scope of the review and comments will depend upon local conditions.
- 6.2 The provision for required fire protection systems is a primary concern in plan review. An estimated 75% of the building code may relate directly to provision for life safety in case of a fire within the building. Therefore, the review may include among other things, the type of occupancy; allowable areas & heights; fire separations; fire resistance of construction; interior finish; occupancy loading; number & location of exit ways; protection of vertical openings & special hazards.

## **7.0 Final Building Plans and Specifications**

- 7.1 When the final building plans are submitted to the LSFPD, they may include modifications required by the LSFPD review official and agreed to by the design professional submitting the plans. Plans may be approved if they agree with the applicable code requirements. Then, a building permit can be issued and construction may begin.
- 7.2 Plan review and approval will be followed by onsite inspections to ensure that the fire protection features & systems are constructed & installed as planned and approved. The inspector will document all deviations from the approved plans. All agreements reached onsite or by telephone shall be documented for all parties in follow-up correspondence or file memos. This correspondence and a copy of the approved plans will be retained by the LSFPD as a permanent record of building construction available for future reference.
- 7.3 As practical, building construction information will be provided to the fire companies responsible for fire suppression and fire inspection of the building. Information provided in all of the plans discussed in this section can aid in pre-fire planning for fire operations.

## **8.0 Certificates of Occupancy**

- 8.1 The LSFPD is not the primary issuing agency for occupancy certificates; therefore, the LSFPD should be involved in the final inspection process. Each agency should certify the building before the Certificate of Occupancy is issued. This certificate indicates that all requirements under the building code (and other applicable codes) have been met and that the building is safe & habitable. All fire protection systems shall be tested and placed in service before occupancy is allowed. The building shall not be occupied until the fire marshal has approved

it. This final review helps to ensure the life safety of the occupants and to verify that any required corrections have been made prior to occupancy.

## **9.0 Fire Inspections**

9.1 Fire safety inspections are conducted at all facilities designated as target hazards. A certified fire inspector using the IFC and specific protocol conducts these inspections. The fire department defines target hazards as falling into one of the following categories:

- a. Hazardous material storage sites
- b. Institutions, high-rises, motels, & special housing complexes
- c. Downtown facilities
- d. Schools, pre-school centers, and recreation facilities
- e. Factories, storage facilities, office or mercantile complexes that have occupant loads above 100

9.2 Small businesses are inspected annually and under the same scrutiny of the IFC. Additionally, the LSFPD conducts:

- a. License inspections - liquor, theaters, secondhand goods, etc.
- b. Complaint inspections - which are investigated anonymously
- c. Requested inspections - provided upon request
- d. Business inspections - performed annually unless otherwise noted

9.3 LFPD fire prevention inspections evaluate maintenance and operations, i.e. "how building is used and how the people in the building practice fire safety". The IFC has been adopted as the local standard for these inspections.

9.4 The LFPD policy for fire prevention inspections is:

- a. To seek voluntary code compliance through education
- b. To require inspections to be comprehensive, viewing all enclosed space
- c. To require all violations be noted
- d. To require the correction of all violations
- e. To provide free consultations regarding solutions to code problems
- f. To extend a 14-day grace period to correct violations if the violation does not present an imminent danger, the owner has agreed to correct the violation and the owner agrees to a specific date for correction
- g. To issue civil infraction citations (tickets) for violations not corrected as specified.

9.5 The LFPD policy for urban wildland interface/defensible space & open space is:

- a. To inspect the urban wildland interface/ defensible spaces and open space at least annually (see open space map)
- b. To identify deficiencies

9.5.1 The building defensible space and open space inspection includes:

- a. Observing road width, access road identification, marked fire lanes, impeded access roads/ fire lanes; defensible space to include designated fire break access roads and clearance of brush & vegetative growth from electrical transmission transformers & distribution lines
- b. Identifying hazardous accumulations of combustible storage items, trash and resistive/non-resistive fire vegetation growth
- c. Observing permissible space around site structures to insure they are clear of vegetation and weed accumulation of 50 feet as applicable or practical at a height of no more than 4 inches
- d. Inspecting around buildings & fire hydrants, post indicating valves (PIVs), and fire department connections for obstructions or deficiencies
- e. Identifying areas where combustible materials, including pallets or
- f. staging of building materials/ equipment, are within 15 feet from building
- g. Identifying any open space areas that require more than a 10-foot vegetation buffer from a residence

9.5.2 The procedure for reporting urban wildland interface/defensible space deficiencies is:

- a. To notify the City's open space coordinator of corrective actions
- b. To review inspection checklist and identify priority of corrective action deficiency as high, medium, or low in Section #3 of Appendix 5
- c. To document all reportable deficiencies in LSFPD violation database for tracking and reporting

## **10.0 Enforcement**

10.1 This includes conducting inspections and answering complaints about fire code violations and ensuring compliance. Fire codes are designed as a minimum standard so compliance with the code can be compared to passing with a "C". Code compliance can become an issue for the court if all other attempts fail to gain compliance. The court can order compliance as well as impose fines for violations of the fire code.

10.2 When violations of the fire laws or ordinances are discovered during regular or spot inspections, the violations will be called to the attention of the owner or occupants. When the situation is not corrected during the inspection or is a recurring uncorrected violation, several types of enforcement procedures may be available to the fire inspection officer. They include:

- a. Warnings or notices of violation. The LSFPD inspection official may issue one of these notices to the owner or occupant stating that a specific violation of fire regulations and/or a fire prevention code has been

identified during the inspection. The fire official, using discretion and judgment, may designate an appropriate period of time for correction of the

## **10.0 Enforcement, continued**

- 10.2
- a. violation cited. Recommendations for correction of the violation also may be noted on the form. The owner or occupant must sign the form and keep a copy of the document. Reinspection after the allotted time is essential to ensure that the correction has been made. If it has not, further legal action should be taken.
  - b. Red tag or condemnation notices. These are usually attached to appliances, systems, or equipment that would be unsafe and dangerous if allowed to remain in operation. The red tag process requires that a component can be removed and the equipment returned to operation. This process also may require that the LFPD fire official inspect the completed work before granting approval to resume the operation of the equipment in question.
  - c. Citation or summons. Violation of the fire prevention code requirements or other fire regulations usually are considered misdemeanors. An authorized fire official may issue a citation or summons to an individual who is in violation of the law. These documents constitute a notice for the violator to appear before the appropriate court.
  - d. Warrants. A warrant is an order issued by a magistrate or agent of the court that directs a law and bring the violator before the court to respond to the charges specified in the document. Arrest warrants are usually issued in felony cases. The person requesting the warrant must provide factual information to the magistrate or court officer issuing the warrant, showing the existence of sufficient "probable cause" of a violation of a law.

Where authorized by state law or local ordinances, the LFPD fire marshal, fire investigators, and other fire officials are empowered to issue summonses, serve warrants and make arrests for felony violation of state laws.

Where violations represent a clear hazard to life or property, it may be necessary for the LFPD fire official to take immediate action to correct unsafe conditions. Entrances into private property, shutdown of an operation, evacuation of a building, or withdrawal of permits are actions that the fire official may find necessary to ensure the public safety. These powers may be explicitly stated or implied in discretionary powers and "duty to act" requirements of appointing laws or ordinances. In all cases, actions must be based on clearly demonstratable threats to public safety, showing that delay would provide an unreasonable danger to residents, occupants, guests, or the public and that this judgment is based on accepted standards or concepts of safety.

## **11.0 Fire Cause and Determination**

- 11.1 Determining the cause of a fire can lead to methods of preventing further similar fires and/or prosecution of those responsible for intentionally set fires. In many cases a fire's cause is determined to be unintentional and the cause can range from an unattended candle to a lightning strike. When a fire is intentionally set the fire department works with the appropriate police agency to build a criminal case and prosecute the responsible party.

## **12.0 Permit and Fee Schedule**

- 12.1 See fee schedule approved by the Board of Directors in 2006.

## **13.0 Other Services**

- 13.1 The fire chief has appointed the fire marshal as the point-of-contact for legal inquiries regarding fires. He represents fire administration on various committees & boards and coordinates civil infraction tickets, pre-fire planning, Knox boxes, public information handouts, commercial property files and incident reporting. Consultations on fire code requirements may be scheduled or provided by phone.

## **14.0 Fire Safety Education**

- 14.1 Our goal is educating the public on how to prevent fire by avoiding high-risk behaviors while teaching what to do to minimize the impact should a fire occur. Our efforts are generally targeted at those who are at the highest risk from fire - the very young and the elderly. Other risk groups may include people who are not capable of self-preservation due to a physical or mental impairment.
- 14.2 Public Education activities are scheduled through the public education coordinator and include:
- a. Station Tours - basic fire safety education is taught to children and adults by firefighters during station tours. An outline of the basic information presented is in the LFPD's Standard Operating Guidelines.
  - b. Public Presentations - given to groups by the fire chief or designees.
  - c. Car Seat Inspections - based on staff availability.
  - d. Juvenile Fire Setting Counseling - the fire marshal coordinates a task force that operates an educational intervention program for families of juvenile fire setters.
  - e. Fire Prevention Week - the LFPD provides station tours and fire safety talks & visits to multiple groups throughout this week.

14.3 Fire safety literature is available at fire station headquarters and distributed to the public during various programs and community events. Information is also provided in the LFPD's annual newsletter.