A. PURPOSE:

To establish requirements or standards to supplement set forth in the International Fire Code or applicable standards of the National Fire Protection Association within the boundaries of the City of Federal Way and the City of Des Moines.

B. REFERENCE:

International Fire Codes, City of Federal Way ordinances and City of Des Moines ordinances.

C. POLICY:

The Fire Marshal's Office has the authority, per the International Fire Code, to adopt other requirements to clearly define, further restrict or allow certain items that may or may not be found in other code references. These will be found in the form of numbered requirements in this section.

D. AUTHORITY & RESPONSIBILITY:

1. It shall be the responsibility of all employees of South King Fire & Rescue who conduct inspections to carry out the policies set forth in this section.
2. The Fire Suppression Division, through regular and special inspections, has the primary responsibility for identification of any violations with regards to any Administrative Policies, Guidelines and Ordinances currently in effect.
3. The Fire Prevention Division shall have the ultimate responsibility for enforcement of any Administrative Policies, Guidelines and Ordinances currently in effect.

E. PROCEDURE:

1. The City of Federal Way ordinances, City of Des Moines ordinances, Administrative Policies and Guidelines currently in effect shall be used to conduct Fire Prevention activities in the same way the International Fire Code and related code references are used.

F. ADMINISTRATIVE POLICIES:

1.001 SPECIAL OCCUPANCY NOTICE

10.001 SECURITY GATES WHEN USED FOR FIRE DEPARTMENT ACCESS ROADS IN RESIDENTIAL AREAS

10.002 FIRE DEPARTMENT CONNECTIONS

10.003 ACCESS ROAD GATES AT COMMERCIAL OCCUPANCIES

10.004 RESIDENTIAL AND COMMERCIAL HYDRANT LOCATIONS

10.005 PORTABLE FIRE EXTINGUISHERS

10.006 FIRE APPARATUS ACCESS ROADS

10.007 MINIMUM FIRE-FLOW REQUIREMENTS

11.001 HALLOWEEN FUN HOUSES AND DECORATIONS

11.002 CHRISTMAS TREES AND DECORATIONS IN PUBLIC BUILDINGS

11.003 ELECTRIC BASEBOARD AND WALL UNIT HEATERS

25.001 STANDBY PERSONNEL

25.002 FIRE WATCH POLICY

25.003 POSTING OF UNSAFE BUILDINGS

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G. INTERLOCAL AGREEMENT BETWEEN THE CITY OF FEDERAL WAY AND SOUTH KING FIRE & RESCUE

H. CITY OF FEDERAL WAY ORDINANCES:

90-33 ADOPTING ORDINANCE OF THE 1988 CODES AND AMENDMENTS

90-54 REGULATIONS FOR THE SALE, HANDLING, DISCHARGE, AND DISPLAY OF FIREWORKS

90-61 ESTABLISHING AND MARKING FIRE LANES

90-64 INSTALLATION AND MAINTENANCE OF SMOKE DETECTORS IN ALL DWELLING UNITS.

91-95 AMENDING ORDINANCE 90-61, RELATING TO PENALTY PROVISIONS FOR VIOLATIONS OF FIRE LANE ORDINANCE

Fire Prevention Division

Guideline No. 1.001

March 12, 1992

SPECIAL OCCUPANCY NOTICE

A. Scope and Purpose

To provide a notice in the occupancy filing system that will alert inspectors of special conditions which have been allowed to exist, or items that are of a special interest in an occupancy, that have been approved by the authority having jurisdiction.

B. Code Authority

International Fire Code sections 102, 104.9, International Building Code sections 102 and 104.

C. Special Provisions

1. When a special condition exists or a point of interest in an individual occupancy, a special occupancy notice (Form 315) shall be placed in the station occupancy file and the Fire Prevention Division's business occupancy file.
2. Special occupancy notices shall be filled out by the Fire Prevention Division and approved by the Assistant to the Fire Marshal prior to placing them in the occupancy file.
3. Once the special occupancy notice has been approved, it shall be placed in the left hand side of the station occupancy file and the Fire Prevention Division's business occupancy file.

Fire Prevention Division

Guideline No. 10.001

November 19, 1991

SECURITY GATES ON FIRE DEPARTMENT ACCESS ROADS FOR RESIDENTIAL OCCUPANCIES

A. Scope and Purpose

This guideline establishes requirements for fire department access through primary and secondary security gates to residential areas.

B. Code Authority

International Fire Code sections 102 and 503.

C. Special Provisions

1. It is a policy of South King Fire and Rescue to require remote opening devices which are compatible to fire department systems on security gates that are not staffed twenty-four (24) hours a day. Gates not in compliance at the time of adoption of this policy must meet the requirements of this policy prior to **January 1, 1994.**
2. Gate openings shall open to a minimum width of fifteen (15') feet (if divided entry with one way in and one way out) and twenty (20') feet (if subject to two way traffic) and have a vertical clearance of not less than thirteen feet six inches (13'6").
3. Sensing device(s) shall be located so the transmitters located on fire department apparatus will operate the opening devices to provide easy and quick access.
4. Gates shall be located at least thirty (30') feet from the intersecting roadway.
5. Electronic sensing devices installed shall be compatible with "Opticom" sending units used by South King Fire and Rescue.
6. Plans and specifications shall be submitted for review and approval prior to construction of the gates and/or installation of the sensing devices(s).
7. A manual override or magnetic spring loaded opening device shall be provided in the event of power failure to allow the gate to open.
8. No additional latching or locking devices are permitted.
9. The approval of gate(s) across fire apparatus access roads may be withdrawn where such gate(s) are not maintained in accordance with the conditions of approval.

Fire Prevention Division

Guideline No. 10.002

January 7, 1992

FIRE DEPARTMENT CONNECTIONS

A. Scope and Purpose

To establish the placement or location of fire department connections (FDC's) to automatic sprinkler and or standpipe systems for newly constructed structures.

B. Code Authority

International Fire Code sections 102 and 903.3.7.

C. Special Provisions

1. All FDC's shall be located not less than 18 inches, nor more than one-hundred-twenty (120") inches from the finished edge of an approved fire apparatus access road.
2. FDC's shall not be located more than fifty (50') feet from a fire hydrant.
    a. FDC's and fire hydrants shall be located on the same side of an approved apparatus access road.
3. FDC's serving sprinkler systems shall not be located on walls of a building.
    a. FDC's serving class 1 or 2 standpipe systems may be located on walls provided such walls are of fire resistive or noncombustible construction.
4. All FDC's shall be identified as to the type of system served, building or area served.
5. Buildings having multiple sprinkler risers shall not be permitted to have separate FDC's for each riser. FDC installation shall comply with either of the following:
    a. Install FDC at valve pit on system side of feedmain to risers.
    b. Install FDC in yard and connect in common to all risers.
6. FDC's shall be installed/located at the front of the building except as otherwise approved by the Fire Marshal's Office.
7. The inlets to the F.D.C. shall not be less than 24 inches nor more than 48 inches above the finished grade of an approved fire apparatus road.
8. Each F.D.C. **shall be provided with a 4 inch Stortz fitting equipped with a gasket and with a minimum 22 degree elbow.** All inlets to the F.D.C. shall be protected with approved **locking** caps
9. The inlets to the FDC shall face the driving surface.
10. The piping between the check valve and the outside hose coupling (F.D.C.) shall be equipped with an approved automatic drip at the lowest point and equipped with adequate drainage.

Fire Prevention Division

Guideline No. 10.003

January 7, 1992

SECURITY GATES ON FIRE DEPARTMENT ACCESS ROAD GATES FOR COMMERCIAL OCCUPANCIES

A. Scope and Purpose

Gates installed across designated fire apparatus access roads are an obstruction and are prohibited except when such gates are installed and maintained in accordance with the following:

B. Code Authority

International Fire Code sections 102 and 503.

C. Special Provisions

Gates when installed across fire apparatus access roads shall be approved by the Fire Prevention Division and shall comply with the following:

1. Gates, when fully opened shall not reduce the required twenty (20') foot width of the fire apparatus access road.
2. Locking or securing of gates shall be in a manner so as not to unduly hinder fire department access.

   Acceptable methods are:

   a. Fire district padlock on a malleable chain.

   b. Padlock with a Knox and/or Supra Box.

   c. Keycard or electronic locking system with a Knox and/or Supra Box.

   d. Any mechanical means where a full-time security guard is present at the gate site and can open such gate.

   e. Electronic sensing devices that are compatible with "Opticom" sending units used by South King Fire & Rescue.
3. Gates shall be located at least thirty (30') feet from the intersecting roadway.
4. Plans and specifications shall be submitted for review and approval prior to construction of the gates and/or installation of the sensing devices.
5. A manual override or magnetic spring-loaded opening device shall be provided in the event of a power failure to allow the gate to open.
6. The approval of gate(s) across fire apparatus access roads may be withdrawn where such gate(s) are not maintained in accordance with the conditions of approval.

Fire Prevention Division

Guideline No. 10.004

January 13, 1992

RESIDENTIAL AND COMMERCIAL HYDRANT LOCATIONS

A. Scope and Purpose

Establishes location, and spacing of fire hydrants at residential and commercial locations. This guideline also establishes the type of connections permitted on a fire hydrant.

B. Code Authority

International Fire Code sections 102 and 508.

C. Special Provisions

1. Fire hydrants shall be located as noted below:
   a. Residential
      1) Six-hundred (600') feet maximum spacing.
      2) Not more than three-hundred (300') feet from a building lot.
   b. Commercial
      1) Three-hundred (300') feet maximum spacing.
      2) Located no closer than fifty (50') feet to the building and no further than one-hundred-fifty (150') feet from the building.

      *All measurements shall be made as vehicular travel distance.
2. Flush type hydrants are prohibited, except upon specific approval of the Fire Prevention Division.
3. Fire hydrants shall have a minimum six (6") inch barrel, and shall have a minimum of two (2) 2-1/2 inch outlets and one (1) 4 inch minimum pumper port with a Stortz connection.
4. All hydrants shall be located between eighteen (18") and one-hundred-twenty (120") inches from the edge of the roadway surface.
5. Fire hydrants shall stand plumb and be set to the finished grade. The bottom of the lowest outlet of the fire hydrants shall be not less than eighteen (18") inches above finished grade.
6. Hydrants shall not be obstructed by any structure or vegetation, nor shall the visibility of the hydrant be impaired for a distance of fifty (50') feet in the direction of vehicular approach to the fire hydrant.
7. There shall be thirty-six (36") inches of clear area around the hydrant to allow for operation of a hydrant wrench on the outlets and on the control valve.
8. The pumper port shall face the street. Where the street cannot be clearly defined or recognized, the port shall face the most likely route of approach and location of the fire apparatus while pumping.
9. At construction locations, all required fire hydrants shall be installed and in operation prior to combustible construction beginning on site.

Fire Prevention Division

Guideline No. 10.005

January 20, 1992

PORTABLE FIRE EXTINGUISHERS

A. Scope and Purpose

Establishes minimum requirements for the installation of portable fire extinguishers in commercial and multi-family occupancies.

B. Code Authority

International Fire Code section 906 and National Fire Code chapter 10.

C. Special Provisions

1. At least one extinguisher with a minimum rating of 2-A; 10-BC for every 3,000 square feet of floor area or fraction thereof, of each floor level on the premises.
2. Extinguishers must be located so that one is within seventy-five (75') feet of travel distance from any point or location in the building, and mounted on a wall so that the top of the extinguisher is no higher than five (5') feet above the floor level.
3. The established extinguishing capacity needed for a given problem or area shall be met with one extinguisher.

   EXAMPLE: Two 1-A; 5-BC extinguishers are not acceptable to provide a required 2-A; 10-BC rating.
4. Specific requirements
   a. See IFC Table 906.

Fire Prevention Division

Guideline No. 10.006

September 10, 1992

FIRE DEPARTMENT ACCESS ROADS

A. Scope and Purpose

To provide a policy for Fire Apparatus Access Roads within the City of Federal Way and the City of Des Moines.

B. Code Authority

Washington Administrative Code 51-24-10201, International Fire Code section 102, City of Federal Way Ordinance 90-61, and City of Des Moines Ordinance

C. Special Provisions

1. Fire apparatus access roads shall have an unobstructed width of not less than twenty (20') feet and an unobstructed vertical clearance of not less than thirteen (13') feet six (6") inches.

   Vertical clearances or widths shall be increased when, in the opinion of the chief, vertical clearances or widths are not adequate to provide fire apparatus access.

   EXCEPTION: When buildings are completely protected with an approved automatic fire sprinkler system, the provisions of this policy may be modified by the chief.

2. Fire apparatus access roads shall be designed and maintained to support the imposed load of a twenty-five (25) ton fire apparatus and shall be provided with a surface as follows:

   a. Commercial: Paved all-weather driving surface.

   b. Residential: All-weather driving surface.

3. The turning radius of a fire apparatus access road shall be as follows:

   a. Not less than a thirty-two (32') foot inside turning radius.

   b. Not less than a forty (40') foot outside turning radius.

4. Dead-end fire apparatus access roads in excess of one-hundred-fifty (150') feet in length shall be provided with approved provisions for the turning around of fire apparatus.

   a. All fire apparatus access roads serving commercial properties which have dead-ends in excess of one-hundred-fifty (150') feet in length shall be provided with a cul-de-sac at the dead-end. All such cul-de-sacs shall not be less than eighty (80') feet in diameter.

   b. All fire apparatus access roads serving residential properties which have dead-ends in excess of one-hundred-fifty (150') feet in length shall be provided with a cul-de-sac at the dead-end. All such cul-de-sacs shall be not less than eighty (80') feet in diameter.

   c. All fire apparatus access roads serving a single residential property which have a dead-end in excess of one-hundred-fifty (150') feet in length shall be provided with a turn-around approved by the chief.

5. When a bridge is required to be used as access under this policy, it shall be constructed and maintained in accordance with the applicable sections of the Building Code and shall be designed live loading sufficient to carry the imposed loads of fire apparatus.

6. The gradient for a fire apparatus access road shall not exceed:
   a. 12 percent to a commercial building or facility.
   b. 15 percent to a residential building or facility.
7. When required, approved signs or other approved notices shall be provided and maintained for fire apparatus access roads to identify such roads and prohibit the obstruction thereof.
8. Plans for fire apparatus access roads shall be submitted to the Fire Prevention Division for review and approval prior to construction.
9. The required width of fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. Minimum required widths and clearances as adopted shall be maintained at all times.

Fire Prevention Division

Guideline No. 10.007

October 2, 1992

Revised: July 1, 1995

MINIMUM FIRE-FLOW REQUIREMENTS

A. Scope and Purpose

Establishes the minimum required fire-flow requirements for buildings hereafter constructed.

B. Code Authority

International Fire Code, section 508 and Appendix B.

C. Special Provisions

The minimum fire-flow requirements for buildings or portions of buildings hereafter constructed shall be in accordance with the International Fire Code Table B105.1.

1. One- and Two-Family Dwellings: The minimum fire flow and flow duration requirements for one- and two family dwellings having a fire area which does not exceed 3,600 square feet shall be 1,000 gallons per minute. Fire flow and flow duration for dwellings having a fire area in excess of 3,600 square feet shall not be less than that specified in the International Fire Code Table B105.1.

   EXCEPTION: A reduction in required fire flow of 50 percent, as approved by the chief, is allowed when the building is provided with an approved automatic sprinkler system.

2. Buildings other than One- and Two-Family Dwellings: The minimum fire flow and flow duration for buildings other than one- and two-family dwellings shall be as specified in the International Fire Code Table B105.1.

3. EXCEPTION: A reduction in required fire flow of up to 75 percent, as approved by the chief, is allowed when the building is provided with an approved automatic sprinkler system. The resulting fire flow shall not be less than 1,500 gallons per minute.

Fire Prevention Division

Guideline No. 11.001

January 8, 1992

HALLOWEEN FUN HOUSES AND DECORATIONS

A. Scope and Purpose

In order to assure a reasonable degree of safety from injury, and fire and life safety in Halloween fun houses.

B. Code Authority

International Fire Code sections 102 and 806.

C. Special Provisions

1. LICENSE: An amusement license is required and may be obtained through the City of Federal Way, City Clerk's Office, 33325 8 Ave S, phone: 253-835-7000.
2. BUILDING: The building must be structurally sound throughout. The building must be equipped with an automatic fire-extinguishing system, an approved smoke-detection system and a public address system that is audible throughout the building. Permits (building, electrical, fire prevention systems, etc.) are required for all work and these permits must be obtained prior to commencing any work. A pre-inspection by the Fire Prevention Division of South King Fire & Rescue is urged prior to finalizing plans for a particular building. The public must obtain a fire and life safety inspection and approval by this department before occupancy and use by the public.
3. Approved telephone communications for emergency use must be provided on the premises.
4. There shall be two (2) approved means of egress from each floor in use. Exits shall be openable from the inside without special knowledge or effort and shall be unobstructed at all times.
5. Interior and exterior stairways and landings shall be in good repair. Stairways shall be provided with handrails. Windows with glass shall be adequately protected from the inside to protect against injury, or where without glass, to protect from falls through the opening.
6. If corridors or mazes are to be constructed, they shall be a minimum width of three (3') feet and substantially constructed of material not lighter than 1/4" plywood.
7. Floors and walkways shall be firm or hard surfaced (no mattresses or spring-walks, etc). Rooms, corridors and walkways shall have sufficient headroom to permit patrons to walk upright throughout the premises. All floors shall be provided with electric lighting sufficient to provide emergency lighting to all usable areas if needed. Electrical wiring shall be subject to inspection by the State Electrical Inspector.
8. No smoking, lighted candles or open flame devices shall be allowed.
9. No blankets, sheets, tarps, plastics and decorative materials such as streamers, cloth, cotton batting, straw, vines, corn stalks, leaves, trees, moss, etc., shall be used unless first rendered flame retardant. A flame test of a random sample of such materials will be made by the Fire Marshal's Office.

Note: A tag must be attached to treated materials indicating the date of treatment, name of application and name of the chemical used.

10. All interior painting shall be accomplished with latex type paints.
11. A minimum of two (2) approved water filled fire extinguishers shall be provided and maintained on each floor. Extinguishers shall be unobstructed and in a readily accessible location. Such extinguisher shall be UL or FM approved.
12. Patron control shall be affected by monitors both inside and outside the building. Prearranged audible signals shall be used between monitors to signal an emergency or abnormal condition on the premises, i.e., fire, panic, fainting, etc. Upon receipt of such signal, ingress to the building shall cease and the building shall be immediately evacuated via the nearest exit. All monitors shall be provided with flashlights which shall be maintained in good working order. Monitors shall be a minimum of sixteen (16) years of age. Each monitor shall be trained in the proper use of the fire extinguishers. All monitors shall have access to and know how to operate the telephone and the electrical panel.
13. Patrons shall proceed through the building single file, in one direction only and in an orderly manner as directed by the monitors.
14. At the completion of activities, nightly, the monitors shall proceed through the building and clean up any accumulation of debris and inspect for possible smoldering fire or other hazardous condition.
15. After final closing of operation, all combustible rubbish and debris shall be collected from the building and grounds and properly disposed of. The building shall then be properly boarded up or otherwise secured against unauthorized entry.

In order that all of the aforementioned requirements be successfully met and approved by all concerned regulating agencies, it is imperative that planning be started no less than forty-five (45) days prior to opening date.

Fire Prevention Division

Guideline No. 11.002

January 13, 1992

CHRISTMAS TREES AND DECORATIONS IN PUBLIC BUILDINGS

A. Scope and Purpose

The use of natural or resin-bearing cut trees or boughs in public buildings shall be in accordance with this guideline.

B. Code Authority

International Fire Code sections 102 and 804.

C. Special Provisions

1. Cut natural trees in buildings protected by a Fire Sprinkler System are recommended to be flame-proofed.
2. Cut natural trees in buildings not protected by a Fire Sprinkler System are ***required*** to be flame-proofed (exception: residential occupancies). Living trees (uncut) and artificial trees are allowed and do not require any fire retardant coatings. Since Christmas trees are not absorbent, the only effective type of treatment is the coating method. It is essential to get a sufficient amount of effective flame retardant chemical onto the surface of the tree. Only the following materials may be utilized as acceptable flame retardant coatings where it is desirable or required to treat the tree or decorations to prevent the rapid spread of fire in a building. These products can be found at local nurseries, paint or hardware stores.
3. Trees shall bear a tag stating date of placement in the public building, type of flame retardant treatment used, name of the person who applied the flame-retardant, the name of the person affixing the tag, a permit expiration date and the name of the designated individual making daily tests.
4. The support device that holds a tree in an upright position shall be of a type that is stable and that:
   a. Does not damage or require removal of the tree stem base,
   b. Holds the tree securely and is of adequate size to avoid tipping over of the tree and,
   c. Is capable of containing a two day minimum supply of water, covering the stem at least two (2") inches, and the quantity of water as follows:

Trees up to 6-1/2 ft. high	½ gallon of water
Trees 6-1/2 ft to 10 ft. high	1 gallon of water
Trees over 10 ft. high	3 gallons of water

5. Prior to setting up a tree, the trunk shall have a fresh butt cut on a diagonal at least one (1") inch above the original cut.
6. Hot tap water shall be used when first filing a support stand. The water level, when filled, shall be at least two (2") inches above the butt of the tree. The water level shall not be lower than the butt of the tree. If the water level should become lower than the butt of the tree, the tree shall be removed immediately or re-cut as described above.

7. Trees should be checked for dryness by the following method. Stand in front of a branch, grasp it with reasonably firm pressure and pull your hand toward you, allowing the branch to slip through your grasp. If the needles fall off readily, the tree does not have adequate moisture content, and it shall be removed immediately.
8. Candles and open flames shall not be used on or near a tree within a distance equal to the height of the tree.
9. Electrical decorations used on trees shall be Underwriter Laboratories or Factory Mutual approved.
10. Trees shall be tested daily by a designated individual. The test shall include a check for dryness in accordance with G above, and adequate water maintained in accordance with D above.
11. Keep the trees and decorations away from sources of heat such as radiators, stoves or fireplaces. ***Do not block exits.***
12. ***Turn off*** all tree and other holiday lighting before leaving the building.
13. In schools and businesses, trees and decorations must be removed from the premises prior to closing for the holidays.
14. For outdoor lighting, use sets approved for outdoor use.

Fire Prevention Division

Guideline No. 11.003

January 28, 1992

ELECTRIC BASEBOARD AND WALL UNIT HEATERS

A. Scope and Purpose

To establish minimum acceptable clearances from combustibles and electric baseboard and wall unit heaters.

B. Code Authority

International Fire Code section 603 and International Mechanical Code.

C. Special Provisions

1. A clear space of not less than six inches shall be maintained in front of and above all electrical baseboard and wall unit heaters.
2. Combustible furniture, drapes or similar materials shall not be placed within this minimum clear space.
3. All electric baseboard and wall unit heaters shall be maintained in proper operating condition in accordance with the original design and in a safe and hazard-free condition.

Fire Prevention Division

Guideline No. 25.001

February 10, 1992

FIRE WATCH PERSONNEL

A. Scope and Purpose

To establish the duties of, and qualifications for fire watch personnel in a place where people congregate.

B. Code Authority

International Fire Code sections 403, 901.7 and 1404.5.

C. Special Provisions

1. As determined by the fire marshal, if it is essential for public safety, personnel shall be appointed.
2. It will be the responsibility of the occupancy to pay compensation to the personnel as determined by the chief.
3. South King Fire & Rescue class 'B' uniform will be worn on duty, or another uniform as approved by the chief.
4. All personnel shall have proof of completion of the "Basic Structural Firefighting" class (FES1.A00) or equivalent as approved by the chief.
5. Personnel shall have means to contact the Valley Communications Center in the event of an emergency.
6. Personnel shall be knowledgeable as to the location of exits, location of fire extinguishers and their use, and be able to employ extinguishment methods in an incipient fire.
7. Personnel shall be bound to the current Personnel Manual.
8. Duration of personnel availability to be determined by the chief.

Fire Prevention Division

Guideline No. 25.002

July 16, 2007

FIRE WATCH POLICY

A. Scope and Purpose

To define when a fire watch is required and clarifies the process to implement a fire watch in the Cities of Federal Way and Des Moines. Unincorporated King County areas are subject to and under the jurisdiction of the King County Fire Marshal's Office.

B. Code Authority

2006 International Fire Code section 403.1, 403.1.1, 901.7

C. Special Provisions

1. **When Required:** When a required fire protection or fire detection system fails, or there are an excessive number of accidental activations or nuisance alarms, or as required in 2006 IFC sec 403.1(when essential for public safety), a building owner (or their representative) may be required by the fire department to provide a fire watch until the system is repaired. A fire watch may also be required whenever a required fire protection or fire detection system is in a trouble or supervisory mode for more than eight hours. A fire watch may also be required when a hazardous materials emergency alarm system fails. **Exception:** scheduled maintenance or testing of above systems lasting less than eight hours.

2. **Definitions:**

   a. Nuisance Alarm: Any alarm caused by mechanical failure, malfunction, improper installation, or lack of proper maintenance, or any alarm activated by a cause that cannot be determined.

   b. Accidental Activation: Any alarm caused by actions of occupants, nature, or other circumstances where the system functions as designed, but in response to an accident or non-emergency situation.

   c. Fire Watch Personnel:

      1) Assembly Occupancies (occupied): See Administrative Policy 25.001

      2) All other occupancies: Fire watch personnel shall be appointed by the building owner (or representative). Fire watch personnel shall be of legal age, have keys to all interior and exterior doors and any exterior gate, carry a working flashlight, have knowledge of the location and use of fire extinguishers, and have a cellular phone to contact 911 and the ability to notify all occupants and evacuate the facility. Note: a professional security company may be required if the property owner cannot meet the above requirements.

      3) The cellular phone number of all fire watch personnel shall be presented to the Fire Department for monitoring purposes.

      4) Fire Watch in excess of 12 hours or which covers a large geographic area will require more than one person.

D. Policy:

When a system fails as defined in "When Required" above, the policy shall be as follows:

1. **During Normal Business Hours:**

   A member of the Fire Marshal's Office shall make contact with the building owner (or representative), and initiate the process of securing the appropriate fire watch and documentation including an entry in the computer system folder "Active Fire Watch." If compliance is unobtainable the facility is to be posted "Fire Watch" and /or "Do Not Occupy" or "Limited Entry" as deemed necessary.

2. **After Business Hours:**

   a. The fire officer responsible for the alarm shall attempt to notify the building owner (or representative) to post a fire watch and complete the "Fire Watch Requirements" form and provide ample "Fire Watch Accountability Log" forms (form 394a). The fire officer shall leave the white copy of the completed and signed form with the building owner (or representative) and forward the yellow copy to the on-duty B/C, and the pink copy to FMO. An entry is also to be made in the department computer system folder titled "Active Fire Watch."

   b. If contact with a responsible party is not achievable, the on-duty fire investigator shall be notified and the approved "Fire Watch" placard shall be affixed (posted) at all entry points of the building (signed and dated by the officer in charge). An entry shall be made in the department computer system folder titled "Active Fire Watch" and e-mail notification to FMO for follow up on next business day.

3. **Assembly Occupancy / Event :** Notify the Fire Marshal

4. **Fire Watch Duties:** As defined on the "Fire Watch Requirements" document (includes the "Fire Watch Accountability Log").

E. Enforcement:

Enforcement of this policy shall be as directed by the building official and fire marshal of the authority having jurisdiction in accordance with the interlocal agreement.

F. Termination of Fire Watch:

The building owner (or representative) may discontinue fire watch after repairs are satisfactorily completed upon approval of either the on duty B/C or a member of the Fire Marshal's Office. The fire watch log shall be forwarded to the Fire Marshal's Office and the facility removed from the active fire watch folder in the department computer system.

Fire Prevention Division

Guideline No. 25.003

July 17, 2007

Posting Unsafe Buildings

A. Scope and Purpose

To establish when and how an unsafe building is to be posted "Limited Entry" within the cities of Federal Way and Des Moines. The intent of posting is to notify occupants and the public that an unsafe condition may exist and to restrict access to the potential unsafe structure. Normally the Building Department will do a follow up inspection within 72 hours and advise the building owner of conditions necessary to resume occupancy.

B. Code Authority

International Property Maintenance Code sections 108.1.1, 109.1, 704.1
Federal Way City Code chapter 5
Des Moines Municipal Code 14.04.140
Uniform Code for the Abatement of Dangerous Buildings

C. Special Provisions

"Limited Entry" posting of buildings shall be done by members of the fire prevention division or the building department of the authority having jurisdiction. Buildings shall be posted at all accessible entrance points, if possible. Photographs of the posting shall be taken and forwarded to the building department for follow up evaluation. Inspectors shall post buildings when there exists conditions unsuitable or unsafe for human occupancy.

Considerations: structural damage, IDLH atmosphere, compromised electrical system, water damage, compromised utilities, egress etc.

Fire Prevention Division

Guideline No. 26.001

October 5, 2006

HOT WORK IN REPAIR GARAGES

A. Scope and Purpose

To establish policies regarding the issuance of operational permits for activities associated with S-1 motor vehicle repair garages in South King Fire & Rescue within the city limits of Federal Way and Des Moines.

B. Code Authority

International Building Code and International Fire Code section 104.

Notes: Under the now historic Uniform Building Code (UBC), repair garages could fall into two occupancy classifications, H-4 or S-3, depending on the types of activities conducted in the business. With the adoption of the International Building Code (IBC), motor vehicle repair garages, regardless of stated operations, are now classified as S-1 occupancies.

Research of the IBC reveals that there have been significant increases to the allowable areas for these types of occupancies. In addition, with the potential for application of IBC section 302.3.1 to multi-tenant buildings, it is possible for large repair garages to operate directly adjacent to and without fire-resistance rated separation from occupancies of much lower hazard. This appears to be an unintended consequence of the broad application of IBC section 302.3.1, a section that appears to be intended to allow for mixed uses in a **single tenant space** (that is those spaces under the direct control of the occupants), and not to **multi–tenant buildings**, where adjacent tenants have no knowledge or control of activities occurring next to them.

Seeing that the hazards present in these occupancies based on their operations and business activity has not changed, it is incumbent upon the enforcement of operational permits, issued by the fire department, to assure that hazards arising from permitted activities are appropriately mitigated. With that goal in mind, pursuant to International Fire Code section 101.3 and under the authority granted to the fire code official by International Fire Code section 104.1, this policy establishes minimum criteria for the issuance of operational permits related to common repair garage activities as enumerated in the International Fire Code section 105.6, until such time as these hazards are addressed in more detail by the IBC.

C. Special Provisions

For the operational permits listed below, a permit will not be issued until the specific requirements listed for each permit have been verified, approved, and documented as satisfied by the fire code official:

1. Compressed Gases (IFC section 105.6.9):
    a. All permit requirements identified in section 105.6.9.
2. Cutting and Welding (IFC section 105.6.12):
    a. All permit requirements identified in section 105.6.12 and applicable section of Chapter 26.
    b. All exit doors from shop area to swing out.
    c. Travel distance from anywhere in the egress access not to exceed seventy-five (75’) feet.
    d. *In multi-tenant buildings:* Minimum fire-resistance rated separation per IBC Table 302.3.2 Required Separation of Occupancies.

Exception: If the building is equipped throughout with an approved automatic sprinkler system the requirements for Occupancies Separation can be a minimum of one hour.

3. Flammable and Combustible Liquids (IFC section 105.6.17):
   a. All permit requirements identified in section 105.6.17.
4. Hazardous Materials (IFC section 105.6.21):
   a. All permit requirements identified in section 105.6.21.
5. Hot Work Operations (IFC section 105.6.24):
   a. All permit requirements identified in section 105.6.24 and Applicable section of Chapter 26.
   b. All exit doors from shop area to swing out.
   c. Travel distance from anywhere in the egress access not to exceed seventy-five (75') feet.
   d. *In multi-tenant buildings:* Minimum fire-resistance rated separation per IBC Table 302.3.2 Required Separation of Occupancies.

      Exception: If the building is equipped throughout with an approved automatic sprinkler system the requirements for Occupancies Separation can be a minimum of one hour.
6. Repair Garage (IFC section 105.6.40):
   a. All permit requirements identified in section 105.6.40 and section 2211.
   b. All exit doors from shop area to swing out.
   c. Travel distance from anywhere in the egress access not to exceed seventy-five (75') feet.
   d. *In multi-tenant buildings:* Minimum fire-resistance rated separation per IBC Table 302.3.2 Required Separation of Occupancies unless no other permitted activities occur in the space.

      Exception: If the building is equipped throughout with an approved automatic sprinkler system the requirements for Occupancies Separation can be a minimum of one hour.
7. Spraying or Dipping (IFC section 105.6.42):
   a. All permit requirements identified in section 105.6.42.

Fire Prevention Division

Guideline No. 6106

April 16, 1996

UNUSED RESIDENTIAL HEATING OIL STORAGE TANKS

A. Scope and Purpose

To establish requirements for the removal or abandonment of unused residential heating oil underground storage tanks (limited to R-3 Residential Occupancies) in South King Fire & Rescue (SKF&R) within the city limits of Federal Way and Des Moines.

B. Code Authority

International Fire Code section 104.

C. Special Provisions

Underground storage tanks of less than 1,100 U.S. gallon capacity, located on a R-3 Residential Occupancy property and used for the storage of home heating oil, that have not been used for a period of one year, shall either be removed and properly disposed of, or abandoned in place.

1. Permit Required

   An International Fire Code (IFC) Permit is required and shall be applied for by the person or company who will be conducting the removal or abandonment of the underground tank.

   The following information shall be submitted when applying for the IFC permit:

   a. A site plan drawing indicating the property lines and building locations in relation to the tank. Site plan need not be to scale.

   b. Tank capacity (in gallons).

   c. Type of fill material to be used, if tank is to be abandoned in place.

      The permit will be issued by SKF&R, located at 31617 1 Avenue S., Federal Way, WA 98003. The Fire Prevention Division may be reached at 253-946-7318 (inspection request line). If you call this number at least two business days before you are going to be removing/filling the tank(s), the paperwork can usually be completed on site. The cost of the permit is $50.00.

      NO WORK SHALL BE DONE PRIOR TO THE ISSUANCE OF A PERMIT, WITHOUT THE APPROVAL OF SOUTH KING FIRE & RESCUE, FIRE PREVENTION DIVISION.

2. General Safety Precautions

   a. Barricade off a minimum twenty (20') foot "safe zone" around the area of work.

   b. Maintain at least two 20-B:C rated fire extinguishers on site.

   c. Do not allow the release of any flammable or combustible liquids onto the ground or into a waterway.

   d. While the tank is being ventilated, flammable vapors flow into the surrounding atmosphere. Ignition sources shall be eliminated from the immediate vicinity.

3. Contamination of Soil and/or Groundwater

   If contamination of the soil or groundwater is detected during the removal or abandonment operation, contact the Washington State Department of Ecology at 425-649-7000. Remediation of the site, if

required, will be under the direction of the Department of Ecology.

4. Conditions for Removal of Underground Tanks

   A site inspection by South King Fire & Rescue, Fire Prevention Division is required ***prior*** to removal of the tank from the ground.

   a. Liquid Removal:

      1) Excavate down to the top of the tank.

      2) Open all valves and allow product lines to drain back into the tank. Use particular care in emptying lines to avoid spilling product into the excavation.

      3) All remaining contents of the tank shall be pumped out and properly disposed of.

      4) The tank shall be triple rinsed. Documentation certifying the triple rinse of the tank shall be provided to the Fire Prevention Division either prior to, or at the time of site inspection.

      5) Disconnect all product lines. Leave the vent line in place or provide a temporary vent if necessary.

      6) Leave fill riser and drop tube in place and cap or plug all other tank openings.

   b. Vapor Removal: The tank must be rendered vapor free before removal.

      1) Carbon dioxide shall be used to render the vapors inert. Use a carbon dioxide cylinder equipped with a pressure regulator.

      2) Remove the fill riser and drop tube and plug opening. Remove a plug from the opposite end of the tank from the vent pipe.

      3) Introduce carbon dioxide into the tank through this opening at a rate of 40 pounds per square inch (psi). The carbon dioxide hose should extend to the bottom of the storage tank.

      4) Vapor concentrations shall be checked periodically with a combustible gas meter. Readings of 20% or less of LEL (lower explosive limit) must be obtained in the tank and the vent riser before the tank is considered to be gas free.

      5) After the tank is gas free, distribute 1.5 pounds of dry ice per 100 gallons tank capacity throughout the length of the tank.

   c. Removal of Tank from Ground:

      1) Plug and cap all openings. Use screwed (boiler) plugs to plug any corrosion leak holes.

      2) Make sure that one plug in the tank has a one-half inch (1/2”) size vent hole open to atmosphere to prevent pressure buildup.

      3) Remove the tank from the site as promptly as possible after purging operations have been completed.

      4) Exercise caution during the loading, securing on the truck and unloading at the disposal site. When transporting the tank, make sure the plug having the one-half (1/2”) vent hole is positioned at the uppermost part of the tank.

      5) If the tank must remain on site overnight, secure in place and barricade around tank. Vapor may be released from scale and sediment in the tank and vapor testing must be done to insure a gas free vessel. If testing indicates vapors are present, repeat vapor removal operations.

5. Conditions for Abandonment in Place

A site inspection by the South King Fire & Rescue, Fire Prevention Division is required at the time of tank filling and sealing of openings.

a. Open all valves and allow product lines to drain back into the tank.

b. All remaining contents of the tank shall be pumped out and properly disposed of.

c. The tank shall be triple rinsed. Documentation certifying the triple rinse of the tank shall be provided to the Fire Prevention Division either prior to, or at the time of site inspection.

d. The tank shall be completely filled with cement-sand slurry or other filler material approved by the Fire Marshal. An acceptable cement-sand slurry mix consists of the following:

   1) 1 yard sand

   2) 1.5 sacks Portland type cement

   3) 47 gallons water

   4) 24 ounces air-entraining agent (Darex, Master Builders)

   5) 18 ounces water wetting agent (WR Grace, Possith 300-N, Master Builders)

e. All tank fill openings vent lines shall be sealed with a filler material and cut six (6") inches below grade if not covered by cement or asphalt.

f. Sand or gravel shall not be used as a filler material

G. Foam Filling of Tanks

In lieu of filling with a cement-sand slurry mix, tanks may be filled with an approved foam agent. Fill the tank with foam until it comes out the tank vent-pipe opening. Type of foam used must be approved by the Fire Marshal.