



5 County Complex Court, Suite 160, Prince William, Virginia 22192 (703) 792-6360 Metro 631-1703, Ext. 6360, Fax (703) 792-6492

Kevin J. McGee Chief

# **EMERGENCY PLANNING AND PREPAREDNESS**

# FIRE SAFTEY/EMERGENCY EVACUATION PLAN PREPARATION PACKET

This document has been prepared as a service to those who are submitting a fire safety/emergency evacuation plan for approval by the Fire Marshal's Office. The intent of this publication is to provide basic guidelines, plan examples and reference materials for the plan designer in order to meet the *minimum* plan requirements as set forth by the 2012 edition of the Virginia State Fire Prevention Code.

The requirements and examples contained herein should **not be considered** all inclusive, as application of the State and County Fire Code and other nationally recognized codes and recommended practices are constantly being evaluated and modified as needed.

Questions concerning the information contained within this publication should be directed to the Prince William County Fire Marshal's Office at 703-792-6360.

For additional information or resources related to disaster preparedness planning or outreach presentations, please email <u>emergencymanagement@pwcgov.org</u>.

### REQUIREMENTS FOR FIRE SAFETY AND EVACUATION PLANS:

(Section 403 2012 Virginia Statewide Fire Prevention Code)

#### REQUIREMENTS FOR FIRE EVACUATION PLANS: (Section 404.2.1 2012 VSFPC)

In accordance to the 2012 edition of the Virginia Statewide Fire Prevention Code, all buildings and occupancies that are classified as a State Regulated Care Facility, or classified as one of the following use aroups: Group A, Group B, Group E, Group F, Group H, Group I, Group R-1, Group R-2, Group R-4, High Rise Buildings, Group M buildings, Covered malls, Underground buildings, or Group A, E or M buildings containing an atrium (see Section 403.8), will furnish the following information to the Fire Marshal:

#### EVACUATION PLAN REQUIREMENTS (see Section 404.2.1)

- Primary and secondary emergency escape/egress routes and the need for complete or partial building evacuation, or by floor if applicable and approved.
- Specific instructions for employees who must remain to operate critical equipment prior to evacuation.
- Post-evacuation accounting procedure for both employees and occupants.
- Personnel responsible for rescue or emergency medical aid.
- The primary and secondary means of occupant notification in a fire or emergency event.
- The primary and secondary means of reporting a fire or emergency event to the designated emergency response organization.
- A description of the emergency voice/alarm communication system, alert tone and preprogrammed voice messages, if so equipped.
- Designation of personnel (and the means by which they can be contacted) who can be contacted for further information/explanation of specific duties as outlined by the plan.

#### Group or Occupancy types defined as follows:

- GROUP A: **Places of assembly**, such as theatres, restaurants, nightclubs, bowling alleys, churches, funeral parlors, arenas and stadiums.
- GROUP B: Business having an occupant load of 500 or more persons or more than 100 persons above or below the lowest level of exit discharge.
- GROUP E: Educational facilities, such as day care centers, elementary schools, middle schools, and high schools.
- GROUP F: Factory Industrial, such as manufacturing, millwork, fabricating, and finishing.
- GROUP H: Buildings/structures that contain materials that support combustion, such as Class I, II or III flammable liquids, combustible fibers, fireworks, flammable solids, corrosives, toxic materials, semiconductor fabrication facilities.
- GROUP I: Institutional facilities such as assisted living facilities, convalescent facilities, group homes, half-way houses, social rehabilitation centers, hospitals, nursing homes, correctional facilities, detention centers, jails, and child care facilities.
- GROUP R-1: Residential facilities such as boarding houses, hotels and motels
- GROUP R-2 College or University Buildings
- GROUP R-4: Residential occupancies that include buildings arranged for occupancy as residential day care/assisted living facilities, which contain more than 5 but less than 16 occupants, excluding staff.
- GROUP M: Mercantile such as department stores, drug stores, markets, gas stations, retailers or wholesalers.

**High-rise buildings.** Fire exit drills shall be conducted annually by building staff personnel or the owner of the building in accordance with the fire safety plan and shall not affect other current occupants.

Covered malls, exceeding 50,000 square feet.

#### Underground buildings

**Buildings with an atrium,** and having an occupancy in-group A, E or M.

#### FIRE SAFETY PLAN REQUIREMENTS: (Section 404.2.2 2012 VSFPC)

- Development of a Fire Safety / Evacuation Plan (See Appendix B for plan template and Appendix C for fire safety check off list)
- The procedure for reporting a fire or other emergency
- Detailed procedures/strategies for notifying, relocating, and evacuating occupants.
- Site plans which indicate:
  - Post-evacuation occupancy assembly point Locations of fire hydrants Normal routes of fire department vehicle access
- Floor plans which indicate:
  - Exits
  - Primary evacuation routes Secondary
  - evacuation routes
  - Accessible egress routes (how to get to access the evacuation routes)
  - Areas of refuge
  - Locations of manual fire alarm boxes Locations of
  - portable fire extinguishers
  - Locations of occupant-use hose stations
  - Locations of fire alarm annunciators and control panels
- A list of major fire hazards associated with the use/occupancy of the premises, to include maintenance and housekeeping procedures.
- A list of personnel responsible for maintaining fire prevention/control systems
- A list of personnel responsible for maintenance, housekeeping, and controlling fuel hazard sources (if applicable).

It is crucial that fire safety and fire evacuation plans are maintained, reviewed and updated annually, and on an as needed basis. The plans must be updated each time the staff assignments (pertaining to the emergency plans) change, the physical arrangement of the building change, or the occupancy changes. (Section 404.3 2012 VSFPC)

The fire safety and fire evacuation plans will be available at the workplace for employee review. Additionally, copies of the plans will be supplied to the Fire Marshal for review and approval. (Section 404.4 2012 SFPC)

### EMERGENCY EVACUATION DRILLS:

(Section 405 2012 Virginia Statewide Fire Prevention Code)

The Virginia Statewide Fire Prevention Code requires that the following occupancies/ use groups conduct emergency evacuation drills. Note that each use group requires different frequencies and participation levels.

#### Table 1: Section 405.2

USE GROUP	FREQUENCY	PARTICIPATION
GROUP A	QUARTERLY	EMPLOYEES
GROUP B	ANNUALLY	EMPLOYEES
GROUP E	MONTHLY	ALL OCCUPANTS
GROUP F	ANNUALLY	EMPLOYEES
GROUP I	QUARTERLY PER SHIFT	EMPLOYEES
GROUP R-1	QUARTERLY PER SHIFT	EMPLOYEES
GROUP R-2	4 ANNUALLY	ALL OCCUPANTS
GROUP R-4	QUARTERLY PER SHIFT	EMPLOYEES
SRCF	MONTHLY	ALL OCCUPANTS

Additionally, the Emergency and evacuation plans submitted to the Fire Marshal will address the record keeping (Section 405.5 2012 VSFPC) requirements, which will indicate the following:

- Name and Title of person conducting the drill
- Date and time of drill
- Notification method used
- Staff members on duty and participating
- Number of occupants evacuated
- Special conditions simulated
- Problems encountered
- Weather conditions
- Time required to achieve complete evacuation

### **EMPLOYEE TRAINING AND RESPONSE PROCEDURES**

(Section 406 2012 Virginia Statewide Fire Prevention Code)

#### Employee training shall include the following as stated in the Statewide Prevention Fire Code:

- 1. All employees shall be trained in the fire emergency procedures described in their fire evacuation and fire safety plans.
- 2. Employees shall receive training in the contents of the fire safety and evacuation plans and their duties as part of new employee orientation and at least annually thereafter. Records shall be kept and made available to the Fire Marshal.
- All employees will receive fire prevention training to include; hazards of the materials and processes to which they are exposed, and safe work practices, which will help to prevent fires during the conduct of their work.
- All employees shall be familiarized with the fire alarm and evacuation signals, their assigned duties in the event of an alarm or emergency, evacuation routes areas of refuge, exterior assembly areas, and procedures for evacuation.
- 5. Employee's assigned fire-fighting duties shall be trained to be proficient in the location and proper use of portable fire extinguishers or other manual fire-fighting equipment and the protective clothing An Equal Opportunity Employer Emergency

### FIRE SAFETY AND EMERGENCY EVACUATION PLAN Guideline

#### **OCCUPANT AND STAFF NOTIFICATION:**

During the course of a fire alarm activation, the staff and occupants will be notified by the following means:

- Primarily, a distinct, audible alarm will sound continuously, accompanied by • strobing lights, which are affixed to each alarm unit.
- Alternately, a pre-recorded vocal announcement will sound over the in-house public address system (every fifteen seconds) which states," Fire emergency! Please calmly evacuate now." During the vocal announcements, the audible alarm will not sound, however it will resume sounding when the vocal announcements are not active.
- The fire alarm will not be silenced or reset until the fire emergency has been ٠ mitigated by fire department personnel, or unless directed to do so by fire department personnel.

#### FIRE DEPARTMENT NOTIFICATION:

- Primarily, the Prince William County Emergency Communications Center will be • notified by the alarm system's monitoring agency in the instance of a fire alarm event/emergency situation.
- Additionally, immediately after evacuating the building, a shift supervisor will call 9-1-1. If no supervisor is available, any employee may call 9-1-1.
- Additionally, any employee may initiate a fire alarm activation by using a manual pull station located through out the facility.

#### STAFF RESPONSIBILITY DURING ALARM/EMERGENCY EVENT:

- The primary concern during a fire alarm/emergency event is to preserve the life and • safety of the occupants and staff.
- The initial response will be to assist all ambulatory and capable occupants to the • primary and secondary routes of egress, and eventually to the buildings exterior, while closing all open doors that are encountered.
- Those occupants who are located on the second floor, and are not ambulatory or otherwise confined to a wheelchair will be assisted into the designated areas of refuge. An employee will remain within the refuge area with the occupants until the emergency is mitigated, conditions become untenable (in which case the employee will continue to descend the stairway with the occupants, and horizontally evacuate), or fire department personnel arrive and give instructions. All occupants and employees will be accounted for at the designated post- evacuation assembly area by a visual head count. Missing persons will be reported immediately to a supervisor, who will convey this information to the fire department personnel.
- A supervisor will be readily available to the fire departments on scene incident commander to assist with facility specific information and logistical support as requested by the fire department.

- The supervisor will also contact regional management to report an incident in • progress; however, all requests made by the fire department are to be given the highest priority.
- The following chart indicates employee specific duties during a fire alarm • event/fire emergency: EXAMPLE

EMPLOYEE	CONTACT	RESPONSIBILITY
SUPERVISOR "A"	EX. 100	Call 9-1-1. Supervise occupant/employee evacuation of first floor. Communicate with Supervisor F. Report missing occupants and employees to fire department personnel.
		Facility Liaison to fire department incident commander. Call regional management.
EMPLOYEE "B"	EX. 102	Evacuate ambulatory occupants of first floor west. Direct occupants to assembly area. Occupant head count.
		Report missing people to supervisor A. Close doors of evacuated areas. Remain with evacuees.
EMPLOYEE "C"	EX. 103	Evacuate non-ambulatory occupants of first floor west. Assist evacuated occupants to assembly area.
		Close doors of evacuated areas. Remain with evacuees. Provide emergency medical aid as needed.
EMPLOYEE "D"	EX. 104	Evacuate ambulatory occupants of first floor east. Direct occupants to assembly area. Close doors of evacuated
		areas. Remain with evacuees Provide emergency medical care as needed.
EMPLOYEE "E"	EX. 105	Evacuate non-ambulatory occupants of first floor east. Assist evacuated occupants to assembly area.
		Close doors of evacuated areas. Remain with evacuees. Provide emergency medical aid as needed.
SUPERVISOR "F"	EX. 200	Call 9-1-1. Supervise occupant/employee evacuation of second floor. Communicate with Supervisor A. Report
		missing people to supervisor A. Manage assembly area. Prepare evacuees for relocation if necessary.
EMPLOYEE "G"	EX. 202	Evacuate ambulatory occupants of second floor west. Direct occupants to assembly area. Assist Employee H.
		Communicate with Supervisor F. Close doors of evacuated areas.
EMPLOYEE "H"	EX. 203	Evacuate non-ambulatory occupants of second floor west, or move to refuge area. Close doors of evacuated areas.

		Remain with evacuees in refuge area. Continue evacuation if conditions become untenable. Move to assembly area.
EMPLOYEE "I"	EX. 204	Evacuate ambulatory occupants of second floor east. Direct occupants to assembly area. Assist Employee J.
		Communicate with Supervisor F. Close doors of evacuated areas.
EMPLOYEE "J"	EX. 205	Evacuate non-ambulatory occupants of second floor east, or move to refuge area. Close doors of evacuated areas.
		Remain with evacuees in refuge area. Continue evacuation if conditions become untenable. Move to assembly area.
MAINTENANCE EMPLOYEE "K"	EX. 306	Report to area outside of main entrance. Meet with Supervisor A; report known conditions. Assist with facility liaison activity.
		Provide fire department personnel with keys, plans or other technical information as needed.
HOUSKEEPER "L"	EX. 307	Close doors to material/supply areas. Evacuate. Report to assembly area.

#### MAJOR FIRE HAZARDS AND MAINTENANCE/HOUSEKEEPING PROCEDURES:

- The facility contains numerous housekeeping and maintenance related materials and supplies. Material Safety Data Sheets (MSDS) are kept on file and are readily available at the front desk, located at the main administration area.
- All flammable/combustible liquids, such as paints, lubricants, solvents, cleaning supplies, etc., are stored in fire proof cabinets, and are not accessible to the occupants.
- Linens are washed and dried on site. All lint traps are cleaned on a daily basis, and require documentation. Additionally, the dryer exhaust system is cleaned quarterly by an independent contractor; records are kept in the main administration area.
- All hood systems and vents are to be kept clean and free of debris and build up as a result of cooking/meal preparation. The hood and vent systems will be cleaned by a contractor twice annually. Records of each cleaning are located in the main administration area.
- Maintenance staff conducts general building upkeep. The first article of this section addresses the materials and supplies the maintenance staff uses.

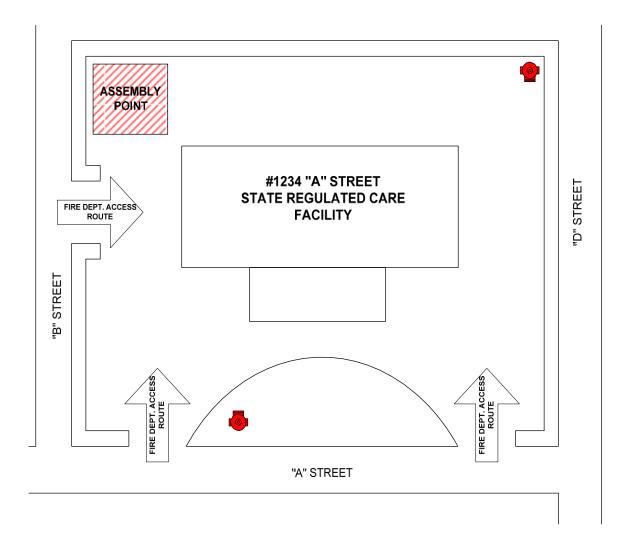
- **All employees** are responsible for maintaining a clean and organized workspace. Equipment and supplies not being used are to be stored appropriately and in such a manor that will not effect either emergency egress or fire fighting operations.
- The maintenance staff is responsible for periodic inspections of fire prevention/control systems, including (but not limited to)portable fire extinguishers, monitoring the fire alarm control panel, battery replacement in smoke detectors (if applicable) and sprinkler head presence/integrity. The maintenance staff will notify an area supervisor in the event that a deficiency or problem is discovered. The maintenance staff *will not* make repairs to any portion of the fire suppression system/fire alarm system, as only a systems qualified technician is authorized to affect such repairs. The maintenance supervisor will contact the alarm company or sprinkler company and request a service technician to report to the facility to make repairs.

### **EMERGENCY EVACUATION DRILLS:**

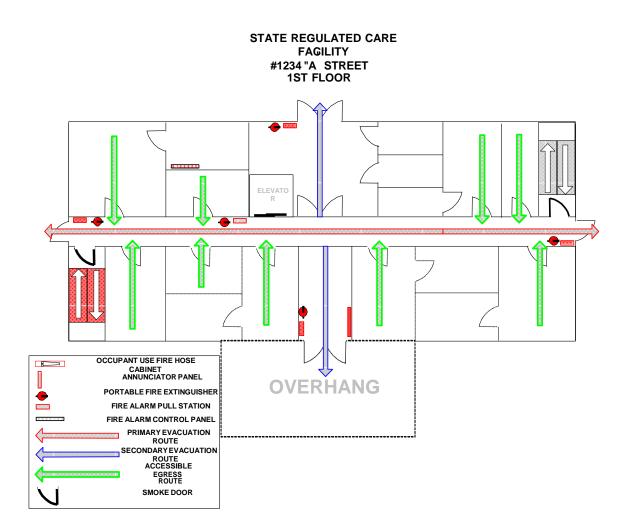
- Emergency evacuation drills/fire drills are conducted on a frequent basis (see occupancy group requirements on page 4), without notice and under varying conditions. IT IS MANDATORY THAT ALL OCCUPANTS AND EMPLOYEES PARTICIPATE. Prior to each drill, The Prince William County Emergency Communications Center will be contacted via the non-emergency number, and notified of the impending drill activity.
- All drills are to be supervised by an area supervisor or an employee appointed by an area supervisor. Records of each drill will be kept on file in the main administration area; an <u>Evacuation / Fire Drill Log sheet</u> (See Appendix A) is affixed to this plan.
- Upon completion of the drill, the employee supervising will call for the distinct "all clear" signal to sound, signifying that the building is safe to re-enter. **No person** will re-enter the building prior to the signal.
- The supervising employee will also notify the Prince William County Emergency Communication Center when the drill has concluded and the facility has resumed normal operations.

#### EMPLOYEE TRAINING:

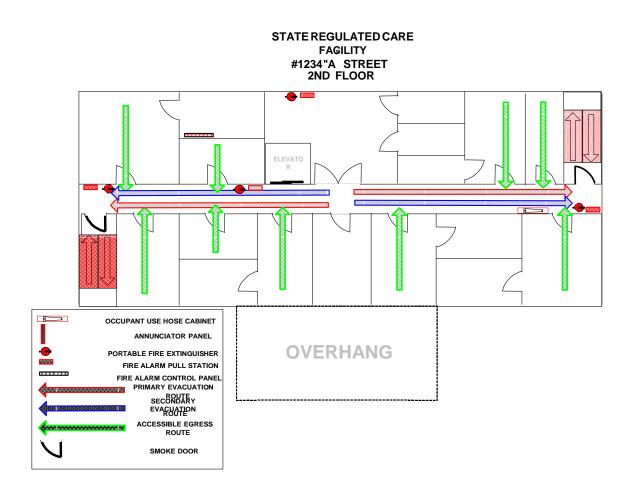
- All employees, upon being hired and prior to regularly assigned duties will receive training relative to this fire safety/emergency evacuation plan, its procedures, and employee specific duties. Additionally, all employees are required to receive annual training and updates as a contingency for continued employment.
- Employee training records are maintained and are kept on file at the main administration area.



# Site Plan Example



### **Floor Plan Example**



# Second floor Plan Example

# **EVACUATION DRILL LOG**

#### I. Location and Identification

Business name:	Address:
Official in charge of drill:	Date of drill:
Start time of drill:	End time of drill:

### II. Frequency

This drill is required:	

### III. Initiation and Notification

This drill was initiated by:	
Describe method of initiation:	

The following notifications were	made:	
FIRE DEPARTMENT	ALARM CENTRAL STATION	
Describe method of notification:		

#### IV. Scenario or Special Circumstances

Description of the simulated scenario and actual weather conditions:	

#### V. Observations

#### (Describe any problems in section VI)

Did all alarm audio/visual devices work properly?	☐ Yes
	No
Was the alarm heard throughout building?	☐ Yes
	No
Did all occupants evacuate as required?	Yes
	No
Did all occupants assemble in designated areas?	Yes
	No

#### VI. Problems encountered

Description of any problems encountered and proposed solutions:		
PROBLEMS	SOLUTIONS	

### VII. Participants

List all participating staff members:		

Drill conducted by:	Job title:
Signature:	Date:

# APPENDIX B **FIRE SAFETY & EVACUATION PLAN**

#### I. Location and Identification

Business Name:	Address:
Main Business Phone:	After hours emergency phone:
Plan Author:	Official in charge of emergency preparedness:
Approx. number of employees:	Posted occupant load:

### **II.** Notification Procedures

In case of an emergency I will notify the Fire Department using the following methods: (calling 911, activating a manual fire alarm pull station, etc.)

In case of an emergency I will notify employees and patrons using the following methods: (fire alarm, overhead announcements, etc.)

#### **III.** Identification and Assignments

The following individuals are responsible for this plan:		

The following individuals are responsible for assisting with		evacuation, rescue and medical aid:

The following individuals are responsible for maintenance, housekeeping and controlling fuel hazard sources:		

The following individuals are responsible for maintenance of systems and equipment installed to prevent or control fires:		

The following individuals are responsible for conducting and managing fire drills:			

#### IV. Fire Protection Systems

This occupancy has the following fire protection systems:			
Fire alarm	Commercial hood system		
Sprinkler system	Fire pump		
Fire Extinguishers	Occupant-use hose stations		
	•		

The fire alarm is activated by the following metho	ds:
Pull stations	Heat Detectors
Smoke detectors	Water flow

Description of fire alarm alert tone and voice communication system:

### V. Identification of Potential Fire Hazards

The following are identified as potential fire hazards related to this occupancy, its use, and maintenance and housekeeping procedures:

#### VI. Procedures

The following are the procedures for relocating or evacuating occupants:

The following are the procedures for accounting for employees and occupants after an evacuation:

The following are the procedures for employees who must remain to operate critical equipment before evacuating:

#### VII. FLOOR PLANS

Attach floor plan for each floor of occupancy. The following information shall be included in each floor plan:

- 1. Exits.
- 2. Primary evacuation routes.
- 3. Secondary evacuation routes.
- 4. Accessible egress routes.
- 5. Areas of refuge.
- 6. Manual fire alarm boxes.
- 7. Portable fire extinguishers.
- 8. Occupant-use hose stations.
- 9. Fire alarm annunciators and controls.

#### VII. SITE PLANS

Attach a site plan for the occupancy. The following information shall be included in the site plan:

- 1. The occupancy assembly point.
- 2. The location of fire hydrants.
- 3. The normal routes of fire department vehicle access.

Plan prepared by:	Preparer's job title:
Signature:	Date:

### APPENDIX C FIRE SAFETY/EVACUTION PLAN REVIEW CHECK LIST

APPROVED []	REJECTED [	]	DATE:			
DOES THE FIRE SAFET	Y/EVACUATION P	PLAN CLEAR	LY ADDRESS	THESE IT	EMS?	
THE NAME AND ADDRESS OF	THE BUSINESS/F	ACILITY?		YES[]	NO [	]
HAS A SITE PLAN BEEN PROVI	DED, WHICH CLE	ARLY IDENT	IFIES: POST-	YES[]	NO [	]
EVAUCATION ASSEMBI LOCATION OF FIRE HYI NORMAL ROUTES OF F	DRANTS?	T VEHICLE A	CCESS?	YES[] YES[] YES[]	NO [	
HAVE <b>FLOOR PLANS</b> BEEN PR	OVIDED WHICH C	LEARLY IDE	NTIFY:	YES[]	NO [	]
ALL EMERGENCY EXITS PRIMARY EVACUATION SECONDARY EVACUAT ACCESSIBLE EGRESS I AREAS OF REFUGE MANUAL FIRE ALARM F PORTABLE FIRE EXTIN HOSE STATIONS FIRE ALARM CONTROL FIRE ALARM ANNUNCIA	I ROUTES TON ROUTES ROUTES PULL STATIONS GUISHERS PANELS			YES[ ] YES[ ] YES[ ] YES[ ] YES[ ] YES[ ] YES[ ] YES[ ] YES[ ]	NO [ NO [ NO [ NO [ NO [ NO [ NO [ NO [	] ] ]
ARE LIFE SAFETY STRATEGIES PARTIAL BUILDING EVACUATIO STRATEGIES IDENTIFIED?				YES[]	NO [	]
ARE SPECIFIC INSTRUCTIONS REMAIN IN PLACE TO OPERAT EVACUATION?				YES[]	NO [	]
IS THERE A SPECIFIC POST-E FOR EMPLOYEES AND OCCUP		DUNTING PRO	OCEDURE	YES[]	NO [	]
ARE PERSONNEL RESPONSIBI	LE FOR RENDERI	NG MEDICAL	AID	YES[]	NO [	]
IS THE PRIMARY MEANS OF OU A FIRE OR EMERGENCY IDENT		ATION IN THE	E EVENT OF	YES[]	NO [	]
IS THE SECONDARY MEANS O EVENT OF A FIRE OR EMERGE			N THE	YES[]	NO [	]
IS THE PRIMARY MEANS OF REIDENTIFIED?	EPORTING A FIRE	OR EMERGI	ENCY	YES[]	NO [	]
IS A SECONDARY MEANS OF R IDENTIFIED?	REPORTING A FIR	E OR EMERG	BENCY	YES[]	NO [	]

## FIRE SAFETY/EVACUTION PLAN REVIEW CHECK LIST

IS A DESCRIPTION OF THE FIRE ALARM'S ALERTING SYSTEM (BELLS, HORNS, STROBES) AND THE PRE-PROGRAMMED VOICE MESSAGE (IF EQUIPPED) PROVIDED?	YES[] NO[]
WHAT ARE THE DUTIES OF SPECIFIC PERSONNEL DURING A FIRE/EMERGENCY AND HOW THEY MAY BE CONTACTED IN THE EVENT OF A QUESTION?	YES[] NO[]
HAS A LIST OF MAJOR FIRE HAZARDS ASSOCIATED WITH THE USE AND OCCUPANCY OF THE PREMISES BEEN PROVIDED?	YES[] NO[]
IS THERE A DESCRIPTION OF THE HOUSEKEEPING/MAINTENANCE PROCEDURES DURING A FIRE/EMERGENCY EVENT?	YES[] NO[]
IS A LIST OF PERSONNLE REPONSIBLE FOR MAINTAINING FIRE PREVENTION AND CONTROL SYSTEM PROVIDED?	YES[] NO[]
IS A LIST OF PERSONNEL RESPONSIBLE FOR MAINTENANCE, HOUSEKEEPING AND CONTROLLING FUEL HAZARDS (IF APPLICABLE) PROVIDED?	YES[] NO[]
ARE THERE RECORDS OF EMERGENCY EVACUATION DRILLS INCLUDING:	YES[] NO[]
NAME AND TITLE OF PERSON CONDUCTING THE DRILL DATE AND TIME OF DRILL NOTIFICATION METHOD USED STAFF MEMEBERS ON DUTY AND PARTICIPATING NUMBER OF OCCUPANTS EVACUATED SPECIAL CONDITIONS SIMULATED PROBLEMS ENCOUNTERED WEATHER CONDITIONS TIME REQUIRED TOA CHIEVE TOTAL EVACUATION	YES[] NO[] YES[] NO[] YES[] NO[] YES[] NO[] YES[] NO[] YES[] NO[] YES[] NO[] YES[] NO[] YES[] NO[]
HAVE ANNUAL EMPLOYEE SAFETY PLAN TRAINING RECORDS BEEN INCLUDED?	YES[] NO[]

Name of Reviewer\_\_\_\_\_

Date of Review\_\_\_\_\_

Comments: