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2.2	Fire Watch	

1. Introduction

A Fire Watch is implemented to ensure the fire safety of building occupants or a building area when the Fire Alarm System or a Fire Protection System has been temporarily disabled due to malfunction or maintenance.

This Environmental Health & Safety Standard Operating Procedure (SOP) for implementing a fire watch was developed by the Department of Environmental Health & Safety in accordance with the University's Policy Statement on Health and Safety and to ensure compliance with the requirements of the Ontario Building Code and Ontario Fire Code.

Assistance in using this guideline and meeting the requirements of applicable Codes is available from the Department of Environmental Health & Safety.

2. Scope

This SOP outlines the requirements of a Fire Watch in Queen's University buildings where there is a temporary impairment of the Fire Alarm System or Fire Protection System. For the purpose of this document, a Fire Protection System shall mean a Fire Alarm System or Fire Suppression System.

3. Applicable Legislation

Ontario Fire Code (O. Reg. 213/07 as amended)

NFPA 101, Life Safety Code

4. Definitions

Approved – approved by Queen's Department of Environmental Health and Safety

Campus Security – Queen's Campus Security and Emergency Services

Audible Device – fire alarm bell or horn

<u>Detection Device</u> – heat detector, smoke detector, beam detector or smoke alarm

EHS – Queen's Department of Environmental Health and Safety

ERC – Emergency Reporting Centre

<u>Fire Protection System</u> – a system designed to detect and notify occupants of a fire or provide fire suppression or smoke control

Fire Suppression System – a system designed to suppress or extinguish a fire.

PPS - Queens Department of Physical Plant Services



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5. Requirements to Implement a Fire Watch

The Ontario Fire Code requires that buildings equipped with fire alarm systems or sprinkler systems be fully operational at all times. Therefore, if any of these systems are offline, for any reason, a Fire Watch is to be initiated *immediately*.

A Fire Watch is only intended as a short term alternative that permits continued occupancy of the building while corrective measures are being implemented.

If a Fire Watch is not possible, the building may not be occupied.

6. Sprinkler Systems

In most buildings, the fire sprinkler system provides fire detection for the fire alarm system. In the event that the sprinkler system is non-functional or is disabled for maintenance, a fire watch is required.

7. Standpipe or Fire Pump

A fire watch is not required when a standpipe system or fire pump is disabled or taken out of service. Whenever possible, EHS must be notified prior to a shut down or immediately upon discovery of a disabled standpipe system or fire pump. EHS will notify Kingston Fire and Rescue.

8. Unoccupied Buildings

In a building that is unoccupied, where a fire alarm system or sprinkler system is offline, a fire watch is required unless otherwise approved by EHS.

9. Notification to Building Occupants

When Fire Protection System is offline or maintenance is scheduled, building occupants are to be notified in writing (email is suitable):

- The nature and duration of the outage;
- That a Fire Watch will be in place;
- Emergency procedures during the outage.

In addition to the written notification signs must be posted at all entrances and in common areas of the building indicating which Fire Protection System is out of order and emergency procedures.

(see sample Fire Watch Signage at the end of this document)





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10. Notification to Kingston Fire and Rescue

If a fire protection system will be offline for less than 24 hours, EHS, PPS or Campus Security shall contact Kingston Fire & Rescue to advise what fire protection system is off-line and that a Fire Watch has been implemented in the building.

If a fire protection system is to be offline for more than 24 hours, EHS shall provide written notification to Kingston Fire and Rescue.

11. Hot Works

Hot works such as welding or cutting is prohibited in areas where the sprinkler system is impaired.

If hot work cannot be avoided in areas where the sprinkler system is impaired, alternate precautions as approved by EHS shall be implemented.

12. Fire Detection Bypass

If hot work, sanding or other activities will be carried out that may result in a false fire alarm activation, then the smoke / heat detectors in the area are to be bypassed. While these detectors are bypassed a Fire Watch is required. The persons performing the work in the area are permitted to carry out the Fire Watch provided they have been informed of how to activate the building's fire alarm system in the event that fire or smoke is found.

If the bypass is limited to the area where the work is being done and is not accessible to other building users, then a notification to building occupants and Kingston Fire and Rescue is not required.

13. Trouble Condition on a Fire Alarm Panel

When a trouble condition occurs on a fire alarm system, the "Trouble" light illuminates, the panel will beep and the display will indicate the nature of the trouble signal. The ERC and/or FMC will receive a notification so that appropriate resources can be dispatched to investigate the issue.

Once a trouble signal is set on a fire alarm system, the ERC or FMC will not receive notifications of subsequent faults that generate a trouble signal. This presents a significant problem if a subsequent trouble condition significantly impairs the fire alarm system.

If a trouble, signal has been acknowledged and silenced at the fire alarm panel, the "Trouble" light will remain lit and the display will indicate the most recent trouble condition.

A subsequent trouble signal will re-activate the audible beeping on the fire alarm panel and the display will indicate the nature of the new trouble signal.

If a trouble will remain active on the fire alarm panel for more than 1 hour, then a modified fire watch is required.



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14. Fire Watch Personnel

Queen's Security staff, employee, or a contractor may perform a Fire Watch. Persons not directly employed by Queen's University must be approved by EHS or PPS.

At least one person shall be employed to complete fire watch duties in all unprotected portions of the building. Fire Watch personnel are to be familiar with the building and procedures for sounding an alarm and alerting the fire department in the event of a fire.

Unless otherwise approved, the person(s) conducting a Fire Watch shall have no other duties.

15. Equipment Required for Fire Watch

Each person assigned to Fire Watch duties shall be provided with the following equipment:

- Suitable means of communication (cell phone, portable radio, etc.) for notifying the Emergency Reporting Centre and Kingston Fire and Rescue
- A portable air horn and whistle or other approved means of sounding an alarm (a whistle is required for when the air horn runs out of air)
- Flashlight
- Copy of appropriate section of Fire Watch Procedures (A E)
- Copy of the Fire Watch Log Sheet (located at the end of this document)
- Keys and/or access codes to provide entry to all rooms/spaces
- Floor plans for the building under Fire Watch

16. Cancellation of a Fire Watch

Cancelling a Fire Watch shall be based on an assessment by a Qualified Fire Protection System Technician; that the fire alarm system or sprinkler system is operational.

Kingston Fire and Rescue shall be notified when a Fire Watch lasting less than 24 hours is cancelled. This notification may be done by EHS, PPS or Campus Security.

Kingston Fire and Rescue shall be notified, in writing, when a Fire Watch lasting more than 24 hours is cancelled. This notification shall be done by EHS.

17. Fire Watch Procedures

The following section provides direction for various situations where a fire alarm system or fire suppression system is not functional.

Variations from these procedures must be approved by EHS.

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A. No Detection, No Audible Devices

- When the detectors, audible devices and fire panel are offline, a general fire watch is required.
- The Fire Watch must be continuous until the fire alarm system is repaired and online. The person conducting the fire watch may not leave the premises unless authorized by the Department of Environmental Health and Safety.
- Fire Watch personnel must tour all unprotected portions of the building at a minimum of once
 each hour actively looking for evidence of smoke and fire. Fire Watch inspections shall be
 continuous.
- Once each hour, the person conducting the Fire Watch shall fill out the Fire Watch Log.
- In locations where construction or maintenance activities are occurring, exit doors, access to exits and corridors shall be checked periodically for proper operation and obstructions.

If Fire or Smoke Conditions are Discovered

- Repeatedly sound 3 long blasts of an air horn or whistle and yell 'Fire Fire Fire'.
- Leave the fire area and close doors.
- From a safe location notify Campus Security via radio or 613-533-6111
- Continue notifying all areas of the building; if it is safe to do so.
- Evacuate the building via the nearest safe exit DO NOT use the elevator.
- Await the arrival of the Fire Department and Campus Security and advise them of conditions inside the building.
- No one shall re-enter the building until the 'ALL CLEAR' has been given by the Fire Department as communicated by the Campus Security Supervisor.



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B. No Audible Devices; Detection is Working.

- When some or all of the audible devices for a building's fire alarm system are not functional, but the heat and smoke detectors are working, there is no requirement for the fire watch to patrol the entire building looking for signs of fire.
- The Fire Watch must be continuous until the fire alarm system is repaired and online. The person conducting the fire watch may not leave the premises unless authorized by the Department of Environmental Health and Safety
- The person conducting the fire watch shall remain by the fire alarm panel instead of patrolling the building.
- In the event that smoke or fire is detected, the fire alarm panel will sound an audible beep and display the location or zone with the active detector.
- Once each hour, the person conducting the Fire Watch shall fill out the Fire Watch Log.
- In locations where construction or maintenance activities are occurring, exit doors, access to exits and corridors shall be checked periodically for proper operation and obstructions.

If Fire or Smoke Conditions are Annunciated by the Fire Panel:

- Repeatedly sound 3 long blasts of an air horn or whistle and yell 'Fire Fire'.
- From a safe location notify Campus Security via radio or 613-533-6111
- All areas of the building without functioning audible devices must be notified.
- Continue notifying all areas of the building, if it is safe to do so.
- Evacuate the building via the nearest safe exit DO NOT use the elevator.
- Await the arrival of the Fire Department and Campus Security and advise them of conditions inside the building.
- No one shall re-enter the building until the 'ALL CLEAR' has been given by the Fire Department as communicated by the Campus Security Supervisor.

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C. No Detection Devices; Pull Stations are Working; Audible Devices Are Working.

- If the fire detection devices are not functional but the fire alarm pull stations and audible devices are working, the person conducting the fire watch is required to patrol all portions of the building that do not have proper detection.
- The Fire Watch must be continuous until the fire alarm system is repaired and online. The
 person conducting the fire watch may not leave the premises unless authorized by the
 Department of Environmental Health and Safety.
- Fire Watch personnel must tour all unprotected portions of the building at a minimum of once
 each hour actively looking for evidence of smoke and fire. Fire Watch inspections shall be
 continuous.
- Once each hour, the person conducting the Fire Watch shall fill out the Fire Watch Log.
- In locations where construction or maintenance activities are occurring, exit doors, access to exits and corridors shall be checked periodically for proper operation and obstructions.

If Fire or Smoke Conditions are Discovered:

- Leave the fire area immediately and close doors
- Activate the building's fire alarm system by using the nearest pull station
- From a safe location notify Campus Security via radio or 613-533-6111
- Evacuate the building via the nearest safe exit DO NOT use the elevator.
- Await the arrival of the Fire Department and Campus Security and advise them of conditions inside the building.
- No one shall re-enter the building until the 'ALL CLEAR' has been given by the Fire Department as communicated by the Campus Security Supervisor.

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D. Sprinkler System Not Functional; Fire Alarm System Is Working

- If the fire sprinkler system provides fire detection for the fire alarm system (most cases) and is out of service, the fire watch person is required to patrol all portions of the building that do not have working sprinklers
- The Fire Watch must be continuous until the sprinkler system is repaired and online. The person conducting the fire watch may not leave the premises unless authorized by the Department of Environmental Health and Safety
- Fire Watch personnel must tour all unprotected portions of the building at a minimum of once
 each hour actively looking for evidence of smoke and fire. Fire Watch inspections shall be
 continuous.
- Once each hour, the person conducting the Fire Watch shall fill out the Fire Watch Log.
- In locations where construction or maintenance activities are occurring, exit doors, access to exits and corridors shall be checked periodically for proper operation and obstructions.

If Fire or Smoke Conditions are Discovered:

- Leave the fire area immediately and close doors
- Activate the building's fire alarm system by using the nearest pull station
- Evacuate the building via the nearest safe exit DO NOT use the elevator.
- From a safe location notify Campus Security via radio or 613-533-6111
- Await the arrival of the Fire Department and Campus Security.
- No one shall re-enter the building until the 'ALL CLEAR' has been given by the Fire Department as communicated by the Campus Security Supervisor.

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E. Trouble on Fire Alarm System

- When a trouble condition occurs on a fire alarm system, the "Trouble" is displayed on the fire alarm panel or an LED labeled "Trouble" will illuminate. the panel will beep and the display will indicate the nature of the trouble signal.
- If a fire alarm technician has acknowledged the trouble signal and silenced at the fire alarm panel, the panel will continue to display the word "Trouble" or illuminate the "Trouble" LED.
- A new trouble signal will re-activate the audible beeping on the fire alarm panel and the display will indicate the nature of the new trouble signal.

If a new trouble condition occurs

- A new trouble condition can be identified by the audible beeping coming from the fire alarm panel.
- Campus Security shall be notified if a new trouble condition is noted. 613-533-6080
- The fire alarm panel shall be checked at a minimum of once every hour to determine if a new trouble condition has occurred.
- The person checking the fire alarm panel does not need to stay in the building and can perform other tasks between checks.



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Revision History

- 1.0: Initial Release
- 2.0: Addition of definitions, expanded procedures to cover various fire protection system outages.
- 2.1: Clarified wording in procedures section.
- 2.2: Formatting changed, clarification in procedures section.

WARNING

FIRE ALARM SYSTEM OUT OF SERVICE

IN CASE OF FIRE CALL 911 or x36111

A FIRE WATCH IS PATROLLING THE AFFECTED AREAS OF THIS BUILDING

IF YOU HEAR 3 BLASTS
OF AN AIR HORN OR WHISTLE
EVACUATE THE BUILDING

FOLLOW POSTED
EMERGENCY PROCEEDURES

FIRE WATCH LOG SHEET

Name or Address of Building:				
Area of Build	ing Under Fire	Watch:		
Date	Time	Fire Watcher	Signature	
Comments / Observations				

All areas of the building under Fire Watch must be inspected and documented at least once each hour in the log above.

This Fire Watch Log is to be maintained at the facility until the re-establishment of fire protection system; at which time this log is to be submitted Queen's Environmental Health and Safety. (613) 533-2999