

#### Fire Watch and Out-of-Service Notification

Responsible Administrator: Campus Fire Marshal

Revised: October 2023

**Summary**: This section outlines the policy and procedures related to Fire Watch and Out-of-Service Notification that are administered through the Environmental Health & Safety (EHS) Department.

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# 1. Program Description

The Fire Watch Program serves as a guideline to watch for hazards after hot work has been performed on a renovation or new construction project on the UC Irvine campus. The Fire Watch Program also applies whenever the fire protection system is out of service for 4 hours or more. This includes during business hours, after business hours, weekends, and holidays.

# 2. Scope

The scope of this program applies to all renovations and new construction projects on the UC Irvine campus. Personnel performing a fire watch include all UC Irvine employees and other employees who are under the supervision and direction of UC Irvine employees. This includes Facilities Management (FM) employees, department construction, and outside contractor personnel.

#### 3. Definitions

<u>Authority Having Jurisdiction (AHJ)</u> – The Authority Having Jurisdiction (or his/her authorized representative) determines the interpretation and application of fire protection requirements as adopted by the State Fire Marshal (SFM). At the UC Irvine campus, the SFM has delegated the Designated Campus Fire Marshal (DCFM) as the AHJ for plan review and construction inspections.

<u>Designated Campus Fire Marshal (DCFM)</u> – At the UC Irvine campus, the SFM has delegated the Designated Campus Fire Marshal (DCFM) as the AHJ for plan review and construction inspections. The DCFM also has the responsibility and authority to enforce SFM regulations and requirements on campus.

<u>Fire Watch for Welding Activities</u> – At least one individual dedicated **solely** to the look out and control of stray fires.

<u>Fire Protection System</u> – Approved devices, equipment and systems or combinations of systems used to detect a fire, activate an alarm, extinguish, or control a fire, control or mange smoke and products of a fire or any combination thereof.

<u>Hot Work</u> – Operations such as welding, cutting, burning, heating, grinding, or similar spark, slag, or intense heat producing activities that are capable of igniting combustible materials or flammable atmospheres or providing a source of ignition for a fire. Also defined as cutting and welding operations for construction/demolition activities that involve the use of portable gas or arc welding equipment, open flame, or spark-producing apparatus.

<u>Project Managers (PM)</u> – A Design and Construction Services (D&CS) or Facilities Management (FM) employee who is assigned to manage construction projects.

Orange County Fire Authority (OCFA) – The local fire authority for the University of California, Irvine campus.

<u>System Out of Service</u> – When a fire alarm system is not transmitting to UC Irvine Central Station or when a fire suppression system has lost water pressure and becomes nonfunctional; for any reason, the system is considered to be out of service.

## 4. Responsibilities

# 4.1 Design and Construction Services (D&CS)

- The Fire Watch may only be performed by an individual who is <u>NOT</u> performing any other duties that would take attention away from the area where the hot work is performed and shall;
  - Be aware of the inherent hazards involved in hot work;
  - Ensure that safe conditions are maintained during the hot work;
  - Know how to report a fire or other emergency situation;
  - Using appropriate Personal Protective Equipment (PPE). Refer to EHS Personal Protective Equipment Program at: http://www.ehs.uci.edu/programs/safety/ppeprogram.html;
  - o Return the completed hot work permit to file;
  - Ensure that any covers from sprinkler heads are immediately removed upon completion of the hot work. Sprinkler heads cannot be covered after work hours and must be removed;
  - Be trained in campus fire safety procedures and the use of fire extinguishing equipment (https://ehs55.ehs.uci.edu:8443/training/classreg.jsp?cid=13);
  - Have access to at least a ten (10) pound ABC fire extinguisher at all times;
  - Must remain in a location that allows immediate communication with the individual(s) performing hot work;
  - o Be familiar with the surrounding facilities to sound an alarm in the event of a fire;
  - Have means of emergency communication to UC Irvine Police Department;
  - Watch for fires in all exposed areas for a minimum of thirty (30) minutes (including lunch and break times), sound the alarm if necessary, and try to extinguish fires only when obviously within the capability of the equipment available;
  - Perform checks and complete the Fire Watch Log (Appendix A) during the specified time period;
  - Ensure that no condition arises, or action is taken, that will lead to a hazardous situation in the hot work area; and
  - Must remain in the work area after work is completed to ensure the risk of fire from hot work has passed (minimum of thirty (30) minutes).
  - Notify the appropriate parties when a fire protection system is out of service.
     Refer to section 5.3 notification for additional information.

## 4.2 Facilities Management (FM) or Housing Personnel (HP)

- The Fire Watch may only be performed by an individual who is <u>NOT</u> performing any other duties that would take attention away from the area where the hot work is performed and shall:
  - Be aware of the inherent hazards involved in hot work;
  - Ensure that safe conditions are maintained during the hot work;
  - Know how to report a fire or other emergency situation;
  - Using appropriate Personal Protective Equipment (PPE). Refer to EHS Personal Protective Equipment Program at: <a href="http://www.ehs.uci.edu/programs/safety/ppeprogram.html">http://www.ehs.uci.edu/programs/safety/ppeprogram.html</a>;
  - Return the completed hot work permit to file;
  - Ensure that any covers from sprinkler heads are immediately removed upon completion of the hot work. Sprinkler heads cannot be covered after work hours and must be removed;
  - Be trained in campus fire safety procedures and the use of fire extinguishing equipment (https://ehs55.ehs.uci.edu:8443/training/classreg.jsp?cid=13);
  - Have access to at least a ten (10) pound ABC fire extinguisher at all times;
  - Must remain in a location that allows immediate communication with the individual(s) performing hot work;
  - o Be familiar with the surrounding facilities to sound an alarm in the event of a fire;
  - Have means of emergency communication to UC Irvine Police Department;
  - Watch for fires in all exposed areas for a minimum of thirty (30) minutes (including lunch and break times), sound the alarm if necessary, and try to extinguish fires only when obviously within the capability of the equipment available;
  - Perform checks and complete the Fire Watch Log (Appendix A) during the specified time period;
  - Ensure that no condition arises, or action is taken, that will lead to a hazardous situation in the hot work area; and
  - Must remain in the work area after work is completed to ensure the risk of fire from hot work has passed (minimum of thirty (30) minutes).
  - Notify the appropriate parties when a fire protection system is out of service.
     Refer to section 5.3 notification for additional information.

#### 4.3 Fire Safety Division

- Coordinate and/or conduct Fire Watch training; and
- Serve as a technical resource for fire prevention issues.
- Place out of service tags at required locations.
- Upon notification, call OCFA Communication Center when a fire prevention system is out of service.
- Assisting with posting Fire Watch Flyers (Appendix- C).

#### 5. Program Components

- 5.1 <u>Criteria</u> for performing a Fire Watch A Fire Watch is required whenever welding or cutting is performed in locations where an incipient stage fire might develop, or whenever any of the following conditions exist:
  - Appreciable combustible materials are closer than thirty-five (35) feet to the point of operation;
  - Appreciable combustibles are present which can be ignited by sparks;
  - Wall or floor openings within a thirty-five (35) feet radius exposure to combustible

- materials in adjacent areas including concealed spaces in walls or floors; or
- Combustible materials are adjacent to the opposite side of metal partitions, walls, ceilings, or roofs and are likely to be ignited by conduction or radiation.
  - 5.1.1 Hot Work A fire watch must be maintained for a minimum of **thirty (30) minutes** after completion of hot work to detect and extinguish smoldering fires.

    Suitable fire extinguishing equipment must be maintained and be ready for use while welding, cutting, and burning activities are performed and during the fire watch
  - 5.1.2 Renovations and New Construction A fire watch must also be performed for a minimum of **thirty (30) minutes** after the completion of hot work on renovation projects or for new construction projects to detect and extinguish smoldering fires.
  - 5.1.3 Out of Service When a fire protection system is not transmitting to UC IRVINE Central Station or when a system is nonfunctional.
    - 5.1.3.1 Out of Service Tag A tag shall be used to indicate that a system, or portion thereof, has been removed from service.
    - 5.1.3.2 Placement of out of service tag The tag shall be posted at each fire department connection, system control value, fire alarm control unit, annunciator, and fire command center, indicating which system, or part thereof, has been removed from service. EHS Fire Safety shall specify where tags are placed.

#### 5.2 Renovations

#### 5.2.1 Partial Floor

#### 5.2.1.1 Campus Building

5.2.1.1.1 Fire Alarm System – In the event that the Fire Alarm System is partial out of service on a floor, signs must be posted on the doors of rooms where the system is out of service. The D&CS or FM Project Manager is responsible for posting the signs in the appropriate locations and to contact EHS to provide out of service tags at the required locations along with posting the Fire Watch Flyer (Appendix- C) at all building exterior exit doors.

5.2.1.1.2 Automatic Fire Sprinkler System – In the event that the Automatic Fire Sprinkler System is partially out of service on a floor, signs must be posted on the doors of rooms where the system is out of service and also on the doors of each entrance to the building. The D&CS or FM Project Manager is responsible for posting the Fire Watch Flyer (Appendix- C) in the appropriate locations and to contact EHS to provide out of service tags at the required locations. The following language should be included on the sign: "The Automatic Sprinkler System is out of service in the following rooms: Room number, etc. In case of emergency, please call 9-1-1.

# 5.2.1.1 Residential Building

5.2.1.2.1 Fire Alarm System – In the event that the Fire Alarm System is partially out of service on a floor, the Resident Assistant (RA) should be contacted as soon as possible with information on the rooms that are affected. If the identified rooms are sleeping quarters, notify all occupants and to contact EHS to provide out of service tags at the required locations and Fire Watch Flyer (Appendix- C). In case of emergency, please call 9-1-1.

5.2.1.2.2 Automatic Fire Sprinkler System – In the event that the Automatic Fire Sprinkler System is partially out of service on a floor, the Resident Assistant (RA) should be contacted as soon as possible with information on the rooms that are affected. If the identified rooms are sleeping quarters, notify all occupants and to contact EHS to provide out of service tags at the required locations. In case of emergency, please call 9-1-1.

# 5.2.2 Entire Floor(s)

#### 5.2.2.1 Campus Building

<u>5.2.2.1.1</u> <u>Fire Alarm System</u> – In the event that the Fire Alarm System is out of service on an entire floor, a Fire Watch must be conducted on the floor, if occupied. EHS shall be contacted to place out of service tags at the required locations.

5.2.1.1.2 Automatic Fire Sprinkler System – In the event that the Automatic Fire Sprinkler System is out of service on an entire floor, a Fire Watch must be conducted on the floor, if occupied. EHS shall be contacted to place out of service tags at the required locations.

## 5.2.2.2 Residential Building

5.2.2.2.1 Fire Alarm System – In the event that the Fire Alarm System is out of service on an entire floor, the Resident Assistant (RA) should be contacted as soon as possible with information on the rooms that are affected. If the identified rooms are sleeping quarters, notify all occupants. A Fire Watch must be conducted. Additionally, Fire Watch Flyer (Appendix- C) must be posted on the door of each entrance to the building. The D&CS or FM Project Manager is responsible for posting the signs in the appropriate locations and to contact EHS to provide out of service tags at the required locations. The following language should be included on the sign: "The Fire Alarm System is out of service on the (number) floor...In case of emergency, please call 9-1-1.

5.2.2.2.2 Automatic Fire Sprinkler System – In the event that the Automatic Fire Sprinkler System is out of service on an entire floor, the Resident Assistant (RA) should be contacted as soon as possible with information on the rooms that are affected. If the identified rooms are sleeping quarters, notify all occupants. A Fire Watch must be conducted. Additionally, signs must be posted on the door of each entrance to the building. The D&CS or FM Project Manager is responsible for posting the signs in the appropriate locations and to contact EHS to provide out of service tags at the required locations. The following language should be included on the sign: "The

Automatic Sprinkler System is out of order on the (number) floor...In case of emergency, please call 9-1-1.

#### 5.2.3 Entire Building

## 5.2.3.1 Campus Building

5.2.3.1.1 Fire Alarm System – In the event that the Fire Alarm System is out of service and not transmitting a signal to UC IRVINE Dispatch Center, a Fire Watch must be conducted and notification to either UC IRVINE Dispatch Center or EHS is required, see section 5.3 notification for additional information. If the building is occupied, at least one person per floor is required to be present during the duration of the Fire Watch. If the building is not occupied, a Fire Watch is not required but Fire Watch Flyer (Appendix- C) must be posted on each entrance to the building and to contact EHS to provide out of service tags at the required locations. The following language should be included on the sign: "The Fire Alarm System is out of service in Building Name. In case of emergency, please call 9-1-1

5.2.3.1.2 Automatic Fire Sprinkler System – In the event that the Automatic Fire Sprinkler System is out of service, a Fire Watch must be conducted and notification to either UC IRVINE Dispatch Center or EHS is required, see section 5.3 notification for additional information. If the building is occupied, at least one person per floor is required to be present during the duration of the Fire Watch. If the building is not occupied, a Fire Watch is not required, but Fire Watch Flyer (Appendix- C) must be posted on every entrance to the building and out of service tags shall be in place at required locations. The following language should be included on the sign: "The Automatic Fire Sprinkler System is out of service in [Building Name]. In case of emergency, please call 9-1-1.

# 5.2.3.2 Residential Building

5.2.3.2.1 Fire Alarm System – In the event that the Fire Alarm System is out of service, the Resident Assistant (RA) should be contacted as soon as possible with information on the rooms that are affected and notification to either UC IRVINE Dispatch Center or EHS is required, see section 5.3 notification for additional information. If the identified rooms are sleeping quarters, notify all occupants. A Fire Watch must be conducted. If the building is occupied, at least one person per floor is required to be present during the duration of the Fire Watch. If the building is not occupied, a Fire Watch is not required, but Fire Watch Flyer (Appendix- C) must be posted on each entrance to the building and out of service tags shall be in place at required locations. The following language should be included on the sign: "The Fire Alarm System is out of service in Building Name. In case of emergency, please call 9-1-1.

5.2.3.2.2 <u>Automatic Fire Sprinkler System</u> – In the event that the Automatic Fire Sprinkler System is out of service, the Resident Assistant (RA) should be contacted as soon as possible with information on the rooms that are affected and notification to either UC IRVINE Dispatch Center or EHS is required, see section 5.3.

notification for additional information. If the identified rooms are sleeping quarters, notify all occupants. A Fire Watch must be conducted. If the building is occupied, at least one person per floor is required to be present during the duration of the Fire Watch. If the building is not occupied, a Fire Watch is not required, but Fire Watch Flyer (Appendix- C) must be posted on each entrance to the building and out of service tags shall be in place at required locations. The following language should be included on the sign: "The Automatic Sprinkler System is out of order in Building Name. In case of emergency, please call 9-1-1.

- 5.3 <u>Notification</u> Before performing a Fire Watch, electronic notification must be sent to all necessary parties: Orange County Fire Authority (OCFA), UC Irvine Police Department (UC IRVINE PD), and the Fire Safety Division.
  - 5.3.1 <u>Fire watch</u> fill out and fax the Fire Watch Notification Form (Appendix B) to the following numbers in advance of performing the Fire Watch:

OCFA: (949) 854-8823

UC IRVINE PD: (949) 824-8567 Fire Safety Division: (949) 824-8539

- 5.3.2 <u>Fire protection system out of service</u> The fire department (OCFA) or EHS Fire Safety shall be notified immediately and, where required by Campus Fire Marshal or their representative, the building shall either be evacuated or approved fire watch shall be provided for all occupants left unprotected by the shut down until the fire protection system has been returned to service.
  - 1. <u>During business hours (7am-5pm) Monday-Friday</u>: Call EHS at (949) 824-6200 and give them the following information:
    - a. Nature of the problem
    - b. Your Name
    - c. Building name and number
    - d. What is type of fire prevention system is out of service (fire alarm or fire sprinkler)
    - e. Estimated time when system is out of service.
    - f. Estimated time when system will be back on-line.
    - g. EHS shall call UC IRVINE Dispatch Center at (949) 824-8223 and shall call OCFA Emergency Command Center (ECC) at (714) 573-6521 for all out of service systems. If the system is off-line more than 24 hours from the initial call, a second call to OCFA ECC will be required.
- 2. After Business hours, weekends, and Holidays: Call UC IRVINE Dispatch Center and give them the above information and make sure to tell them that they need to call OCFA ECC. If the system is off-line more than 24 hours from the initial call, a second call to OCFA ECC will be required.

#### 6. Reporting Requirements

No reporting requirements are required for this program.

# 7. References

California Fire Code, Chapter 9, Fire Watch Guideline

California Fire Code, Chapter 14, Fire Safety During Construction, Alteration or Demolition of a Building

California Fire Code, Chapter 26, Welding and Hot Work Permit

Title 19, California Code of Regulations (19CCR)

Appendices:

A - Fire Watch Log

B – Fire Watch Notification Form

C - Fire Watch Flyer

# Appendix A – Fire Watch Log

Today's Date: Facility Name: _					
Campus Building Number:					
Floor Number and Room Numbers:					
Start Date and Start Time of Fire Watch:					
Predicted End Date and End Time of Fire Watch:					

Time	Safe Conditions Maintained
7:00am	
7:30am	
8:30am	
9:00am	
9:30am	
10:00am	
10:30am	
11:00am	
11:30am	
12:00pm	
12:30pm	
1:00pm	
1:30pm	
2:00pm	
2:30pm	
3:00pm	
3:30pm	
4:00pm	
4:30pm	
5:00pm	
5:30pm	
6:00pm	

# **Appendix B – Fire Watch Notification Form**

□ Fire Safety Division (949) 824-8539

This form must be completed and sent to all parties listed below whenever a Fire Watch is required as specified in the EHS Fire Watch Program.

Today	's Date: Facility Name:						
Campı	Campus Building Number:  Floor Number and Room Numbers:  Start Date and Start Time of Fire Watch:  Predicted End Date and End Time of Fire Watch:						
Floor I							
Start D							
Predic							
Descri	ption of Work Requiring Fire Watch:						
	and Title of Person Performing Fire Watch:						
Name	and Title of Person Responsible for Fire Watch Activities:						
Fax thi	s form to the following numbers:						
	Orange County Fire Authority (OCFA) (949) 854-8823						
	UC Irvine Police Department (UC IRVINE PD) (949) 824- 8567						

# FIRE ALERT FIRE SYSTEM OUT OF SERVICE

# EMERGENCY FIRE WATCH PROCEDURE

By orders of the State Fire Marshal, EH&S and UC Irvine Police Department this building is under Fire Watch, pursuant to Health and Safety Code §1308 until future notice.

Building:	
Floors:	
Starting Date/Time:	
Ending Date/Time:	
Please follow these d	irections:

Posted Date/Time: