

# **SECTION 24–FIRE ALARM SYSTEM**

- 24.1 Fire Alarm System Operation**
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# 24.1 FIRE ALARM SYSTEM OPERATION

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## A. Objective

To protect Harper community and property from fire in the form of alarm/detection systems, building notification systems and extinguishing systems. This procedure will cover responsibilities for the maintenance and testing of the fire alarm system as well as the procedure for either bypassing alarms and/or notification if the system is down due to impairments.

## B. Scope

This procedure is applicable to the Physical Plant Department or any other department that may require changes or disabling of the fire alarm system and to Harper College Police Department (HCPD) which monitors the fire alarm system and may put the alarm in bypass per permit.

## C. Definitions

**Bypass** – Alarm system is **operable**, only certain detection devices are temporarily taken off line. This situation is requested to and implemented by HCPD, from an Employee or Supervisor by completing a Bypass Permit.

**Impairment** – Alarm system is **inoperable**, **NO** signal (alarm or trouble) is sent to HCPD and **NO** horns or strobes work to notify occupants of a problem. This may also include impairments of the fire sprinkler systems. This situation is due to a breakdown of the system and repairs must be made. There shall be **NO** “Hotwork” (see Section 23 for Hotwork Procedures) performed in the building that is in impairment.

## D. Responsibility

There are three College units that have responsibilities in the operation of the fire alarm system:

- Harper College Police Department (HCPD) is responsible for monitoring and notification of the fire department and required College personnel of fire detection alarms. HCPD will implement requests for the building to be put in Bypass via a Bypass Permit. If a building is impaired, HCPD will conduct a Firewatch and inform the necessary Harper personnel (Vice Pres. Council, Building Administrators and Dept. heads in the impaired building), Fire Department, and Manager, Environmental Health & Safety (Mgr. EH&S), who will in turn notify the insurance company.
- Physical Plant Utilities Department is responsible for the maintenance, inspection, testing and repair of the fire alarm systems. The permit requestor will determine which devices should be put in bypass, Utilities will help determine if needed. Finally they will notify HCPD, Director of Physical Plant and Mgr. EH&S if a building fire system is impaired or a planned impairment.
- The Manger Environmental Health & Safety conducts evacuation drills.

## E. General Operational Procedures

### Testing and Maintenance of Fire Alarm System

All fire alarm systems shall be tested at least annually by designated trained Utilities personnel or by a contractor knowledgeable in the operation and functions of the system. The Utilities department will maintain all testing documentation.

### Monitoring, Notification and Bypass Permit Implementation

The fire alarm system shall be continuously monitored by Harper College Police personnel. When the system goes into “fire alarm” (red light alarm) HCPD shall immediately contact the Fire Department to respond. The fire alarm shall only be silenced or “reset” upon instruction by the Fire Department (with the exception of evacuation drills).

When the fire system goes into “trouble alarm” (yellow light alarm) HCPD shall immediately contact the Utilities Department. Utilities Dept. will then investigate and reset the panel at the troubled building.

HCPD shall implement a Bypass Permit by setting the appropriate controls to the alarm panel, devices that are determined by Utilities Dept.

### **Evacuation Drills**

The Manger, Environmental Health and Safety (Mgr. EH&S) will conduct evacuation drills throughout the year. The Mgr. EH&S will conduct evacuation drills with the assistance of the Palatine Fire Department. The Mgr. EH&S will notify HCPD immediately prior to conducting the evacuation drill and in which buildings the drills will take place. At the conclusion of the drill, the Mgr. EH&S will “reset” the system.

### **Fire Alarm System Bypass Procedure**

The fire alarm system and their components may be required to be put in bypass mode for maintenance/repair, testing, dusty work that cannot be isolated or hot work. Putting the system in bypass shall be planned and limited to an eight and half hour time period (one shift). The Supervisor or Employee of the Department conducting the work shall complete the Bypass Permit. The following procedures shall be followed for bypassing any component of the fire alarm system:

#### **Testing, Maintenance and/or Repair to the Fire Alarm System**

Utilities Dept. (or designated contractor) shall conduct maintenance, testing or repair to the fire alarm. If any of these operations may trigger a non-intentional activation of the system, the Supervisor shall complete a Bypass Permit. For testing, maintenance or repair to an entire building fire alarm system the entire building may be put in bypass. If the fire alarm system is **impaired** Utilities shall inform HCPD, Director of Physical Plant and Mgr. of EH&S.

#### **Dusty Work**

The department performing the “dust creating” work shall take measures to control large amounts of dust, fumes, vapors, etc. The following steps for isolation should be considered before requesting a Bypass Permit:

- Implement engineering controls to limit dust/fumes/vapors, etc. by installing plastic around work area, ventilate work area and/or using wet methods to limit dust creation.
- Department may cover smoke detectors in the vicinity of the work being performed. (use detector covers-preferred, or a paper bag). Supervisor must ensure these are removed at the end of the work.

If work that is being done is creating such dust/fumes, etc. that cannot be controlled by any of the above isolation controls then a Bypass Permit may be requested by the Supervisor or Employee conducting the work.

#### **Hot Work**

Operations involving cutting or welding are referred to as Hot Work. All safety procedures for Hot Work Operations are outlined in the Environmental Health and Safety Procedure Manual, Section 23. Hot Work is **not** allowed in buildings where there is a fire alarm or sprinkler system impairment.

# 24.2 FIRE ALARM SYSTEM BY-PASS PERMIT

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## FIRE ALARM SYSTEM BYPASS PERMIT "Bypass Permit"

This Fire Alarm System Bypass Permit is **required** for any work that is performed inside a building where operations may trigger the alarm for a non-fire event or for service to the fire alarm system. This Bypass Permit only temporarily bypasses (de-activates) the selected detection devices, all other detection systems are in operation.

Work being done by:  
 Employee Name: \_\_\_\_\_ Dept. \_\_\_\_\_

Contractor Name: \_\_\_\_\_ Phone # \_\_\_\_\_

*(The Permit must be signed below by the Harper employee that has hired or is working with a Contractor. Contractors may not complete the permit. Contractors should bring a signed Permit to Harper Police prior to beginning work.)*

Work in Building and Room/Area:

**Reason for Bypass:**

TESTING     Smoke Detectors     Sprinklers     Other \_\_\_\_\_

MAINTENANCE / REPAIR Describe:

DUSTY WORK *(isolation controls must be attempted first)*

HOTWORK *(also see Hotwork requirements and permit in Section 23)*

Other (describe):

The following detection devices or entire building are to be put in bypass: *(list room number and type of detector and/or number of detectors, ex: A101 – 2 smoke detectors.)*

Print Name: (Supervisor/Employee of Department Conducting Work or has hired Contractor):

Sign (original signature) :

**Date:**

**Time Permit Begins:**

**Time Work is expected to end (max. 8.5 hours):**

**Section to be completed by Harper College Police Dept. (HCPD)**

**Time System put back:**

**HCPD Call for Service #**

**HCPD will automatically reset the Fire Alarm system after this Permit has expired (8.5 hours max.) If additional time is needed another Permit must be completed. Permit is to be posted in HCPD near Fire Alarm Panel.**