



STEVENS
INSTITUTE of TECHNOLOGY

Office of Environmental Health and Safety
Tel 201 216-8971
ehs@stevens.edu
<http://www.stevens.edu/sit/finance/ehs>

Fire Detection and Suppression Impairment Guidelines

Fire detection and suppression systems in buildings are integral pieces of the Stevens Institute of Technology Fire Safety Program. These include, but are not limited to, single station smoke detectors, centrally monitored fire alarm systems, sprinkler systems, fire hydrants, water supply lines, fire department connections and post indicating valves, fire pumps, carbon dioxide detection systems, kitchen suppression systems as well as fire extinguishers.

The majority of Stevens alarm and sprinkler systems are monitored continuously by Simplex Grinnell. In the event of an alarm condition, Simplex notifies Hoboken Fire Department and Stevens Police.

Maintaining Fire Detection and Suppression Systems During Alterations, Construction, Demolition and Renovation Projects

Fire alarm and suppression systems in buildings being altered, constructed, renovated or demolished shall maintain fire detection and suppression for as long as possible for reasons of life safety and property preservation. **Under no circumstances** unless approved by the Fire Safety Coordinator shall a fire detection system or suppression system be completely or partially removed from service.

In the event that the detection and/or suppression system has to be removed **partially or in full**, it shall be replaced with a temporary fire alarm system for the reasons of personnel safety and property conservation. Building occupants will be notified of the fire protection system impairment. The temporary system must remain operational at all times while the building system is out of service.

Contractors on site who may need to cover a smoke detector for sanding and other dust producing operations must first notify Steven Office of Facilities and Campus Operations personnel, Stevens Police and the Fire Safety Coordinator. These detectors must be returned to operational condition that day, before the contractor leaves the area.

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Suppression and Detection System Impairment Procedures

After approval, the following steps must be followed when a fire detection and/or suppression system, including a kitchen suppression, sprinkler, standpipe other gaseous system is taken out of service.

Out of Service for Less than 1 Hour

The system shall be brought back into service without notification of outside agencies by the Stevens Office of Facilities and Campus Operations personnel or Fire Detection and Suppression contractor.

Out of Service for Greater than 1 Hour

Office of Facilities and Campus Operations will tag the out of service equipment with an impairment tag and notify Stevens Police who will notify Hoboken Fire Department at (201) 420-2007 The following information must be provided to HFD; as per N.J. fire code 901.7, 901.7.1, 901.7.3 and 901.7.4

1. Building
2. Address
3. Type of malfunction
4. How long the system will be out of service
5. What is being done for temporary protection
6. Stevens Manager authorizing shut-down
7. Who will become the Impairment Coordinator

Out of Service for Greater than 8 hours, Stevens Police will make the following additional notification:

Chubb Group of Insurance Companies, Loss Control Services:
Complete the attached form provided by Chubb insurance and fax it to (215)-981-8184.
These notifications shall be recorded in the Police Log.

Whenever a fire system is out of service, high hazard operations, such as but not limited to: welding, spray painting, work with flammable liquids must be suspended.

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After the system is restored the following must be completed by the Office of Facilities and Campus Operations in accordance with N.J Fire code 901.7.6

1. Inspect repairs
2. Notify superiors
3. Notify Hoboken Fire
4. Notify Chubb Insurance and Alarm Company
5. Remove Impairment tags
6. Submit Hoboken Fire Department's Impairment Form (attached) to the Hoboken Fire Marshall with a copy of the fire log.

When the fire protection system is restored, it must be returned to normal operation (i.e. test and open valves). All equipment must be returned to "automatic" mode if it had been placed in "manual" mode.

Fire Watch Procedures

Residential Buildings

Residential Buildings shall have a functioning fire alarm system or temporary system in place at all times.

When a fire protection system is discovered to be out of service by any Stevens's employee, that employee shall contact Campus Police at X5105 and not leave the premises until a fire watch has been established.

Fire Watch in residential buildings will be administered by Campus Police and all residents will be notified about the impaired alarm by Residence Life.

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Persons performing fire watch must be vigilant at all times; they must arrange break times as not to interrupt the watch. They shall be on constant patrol and maintain a log (see attached form) every half hour and also radio in their findings to Campus Police Dispatch. The completed log will be attached to the HFD Impairment Form and forwarded to the Hoboken Fire Marshal.

Fire watch will continue until the detection/suppression system is restored.

At the discretion of the Stevens Fire Safety Coordinator, battery operated smoke detectors may be installed temporarily, if the building system smoke detectors are out of service.

Building other than Residential

After notification to Stevens Police, Office of Facilities and Operations, and Office of Environmental Health and Safety, it will be the decision of these departments to determine how the building will be protected.

Possible protective measures may include:

- Fire watch by Office of Facilities and Campus Operations personnel
- Installation of battery operated smoke detectors
- Increased Campus Police patrol
- Other equally effective measure of protection

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Fire Protection System Impairment Form

INSTRUCTIONS: When fire protection systems (e.g., sprinkler systems, fire detection systems, special extinguishing systems) are impaired for more than **eight hours** due to an emergency or routine maintenance, complete the top portion of this form. Fax or e-mail the form to the **Chubb Group of Insurance Companies, Loss Control Services** when impairment begins.

Fax: 215-981-8184 or 215-981-8024

Email: mazfire@chubb.com

Company Name: _____

Location of Impairment: _____

Impairment Reported by: _____ Title: _____

Phone: _____ Fax: _____ Email: _____

Description of Impairment: _____

Reason for Impairment: _____

Expected Length of Impairment: _____

Action Taken by Local Management

1. Was the fire department notified? Note: Alarm company does not call FD Yes No
2. Is the impaired area monitored by a heat/smoke detection system? Yes No
3. Is the protection system monitored locally or by central station? Local Central Station
4. Is a standpipe system available for the impaired area? Yes No
5. Are additional fire extinguishers available in impaired area? Yes No
6. Have hazardous operations been discontinued? Yes No
7. Is the impaired area patrolled by watchmen/security personnel every 15-30 minutes during the impairment? Yes No
8. Additional actions taken: _____

Action Recommended by the Chubb Group of Insurance Companies _____

Recommendation Submitted by: _____ Date: _____ Phone: _____

SYSTEM RESTORATION: Complete this section and return the entire form to Chubb by fax or e-mail when system is fully restored

Dates System Restored _____

Notification Submitted By _____

Date: _____

Did you do the following?

2" drain test conducted? Yes No

Test results - Static _____ Residual _____

Do 2" drain results compare to past test results? Yes No

Sprinkler alarms tested? Yes No

Central station notified? Yes No

Out of Service tags removed? Yes No

Chubb use only	
PCRE E-mail aryan@chubb.c UND E-mail fmurray@chubl Und Div <u>CIS</u> Po# <u>35853705</u> Occupancy # _____	

Sample Fire Protection System Impairment Planning Roles and Responsibilities

Fire protection systems help save lives and protect property. But planned maintenance or system damage can put these critical systems out of commission, elevating the risk of serious fire damage. Fortunately, creating and following a rigorous fire protection plan can help counteract the increased risk posed by system outages. See Chubb's "Creating a Fire Protection System Impairment Plan" for an overview of the major steps to include in your plan. Be sure to include the key fire system impairment roles and responsibilities listed below. Adapt this sample document to meet your specific needs.

[Company Name] has developed a fire protection system impairment plan to address the increased risk of fire and minimize the duration of impairment. This plan should meet the minimum requirements of NFPA 25, Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems.

Key roles and responsibilities established as part of this plan are detailed below.

Fire Protection System Coordinators

The responsibility of the fire protection system coordinator is to identify impairments and implement the plan. The following employees have been selected as coordinators:

First Shift 7:00 AM – 3:00 PM	[Primary coordinator]	[Secondary coordinator]
Second Shift 3:00 PM – 11:00 PM	[Primary coordinator]	[Secondary coordinator]
Third Shift 11:00PM – 7:00 AM	[Primary coordinator]	[Secondary coordinator]
Weekends	[Primary coordinator]	[Secondary coordinator]
Holidays	[Primary coordinator]	[Secondary coordinator]

Impairment Notification

It is the responsibility of the coordinator to provide notice of the impairment to the following:

Alarm Company: [Phone number], [Fax number]

Fire Department: [Phone number], [Fax number]

Chubb Group of Insurance Companies: Fax Fire Protection System Impairment Form to 215-981-8184 or 215-981-8024; or email Chubb at mazfire@chubb.com

Security: [Phone number], [Fax number]

Plant Manager: [Phone number], [Fax number]

Additional Responsibilities

Place Out of Service tag on affected equipment.

- Identify and cease high-hazard functions in the affected area. These functions include cutting and welding, spray painting, flammable liquid use or transfer, gas mixing and smoking.
- Provide temporary protection appropriate for the affected area. Examples are connecting a fire hose to a hydrant, providing extra portable fire extinguishers or tying the impaired system into an in-service system.
- Arrange frequent tours of the affected area, at least every 15 to 30 minutes.

System Restoration

- Conduct two-inch main drain tests to verify all sprinkler system control valves are open and record results.
- Ensure that all fire protection equipment is placed in automatic mode.
- Account for and remove all Out of Service tags. Return tags to Chubb's Risk Mitigation Toolkit (yellow envelope) for future use.
- Notify fire department, alarm company, security and plant manager that the system is in service.
- Complete System Restoration section of the *Fire Protection System Impairment* form and fax or email to Chubb.



City of Hoboken
DIVISION OF FIRE
 BUREAU of FIRE PREVENTION & INVESTIGATION
 201 JEFFERSON STREET
 HOBOKEN, NEW JERSEY 07030



Captain Stephen DiVincenzi
 Fire Marshall
 (201) 420-2269

PRE-PLANNED/EMERGENCY IMPAIRMENT

(Please print or type all information)

Local Enforcement Agency
 Uniform Fire Code
 State of New Jersey

APPLICATION
 DATE _____

BUILDING SHUT OFF	YES/NO
STREET SHUT OFF	YES/NO

CAUSE OF IMPAIRMENT _____

Nature

AN IMMINENT HAZARD HAS BEEN IDENTIFIED AT THIS
 PREMISE- IDENTIFY HAZARD

Code Section:

N.J.A.C. 5:10-2.16 (b) 5.

LEGAL OWNER _____

PROPERTY ADDRESS _____

IMPAIRED	YES OR NO
FIRE ALARM	
OTHER SYSTEM	
OTHER SYSTEM	

FIRE SUPPRESSION SYSTEMS	YES OR NO	AREA
FIRE SUPPRESSION IMPAIRED YES /NO		
SPRINKLER SYSTEM YES/NO		
STAND PIPE SYSTEM YES/NO		
FIRE PUMP YES/NO		

Nature:

DUE TO IMMINENT HAZARD, THIS PREMISE IS TO BE
 VACATED, CLOSED, OR HAZARD CORRECTED IN 24 HOURS

Code Section:

N.J.A.C. 5:70-2.16 (b) 5.

EMERGENCY IMPAIRMENT SHUT
 DOWN

SHUT DOWN DATE _____

ESTIMATED RETURN
 DATE _____

SHUT DOWN HOUR _____

ESTIMATED RETURN
 HOUR _____

OR

PLANNED IMPAIRMENT

SHUT DOWN DATE _____

RETURN
 DATE _____

SHUT DOWN HOUR _____

RETURN
 HOUR _____

Nature:

IN LIEU OF CLOSURE AN APPROVED FIRE WATCH SHALL BE
 CONDUCTED AT THIS PREMISE BY STAFF/PRIVATE FIRM

Code Section:

N.J.A.C. 5:70-3,901.7

COMPANY NAME
 OR LIST OF STAFF _____

COORDINATOR NAME/TITLE _____

COORDINATOR PHONE # _____

Nature: PROVIDE NAME AND CONTACT INFORMATION OF INDIVIDUAL WHO WILL ASSUME ROLE OF IMPAIRMENT COORDINATOR
Code Section: N.J.A.C. 5:70-3, 901.7.1

IMPAIRMENT COORDINATOR IS RESPONSIBLE FOR SAFETY AND THE RETURN OF ALL THE SYSTEMS TO OPERATIONAL STATUS

IMPAIRMENT

COORDINATOR NAME/TITLE _____
24 HR COORDINATOR PHONE # _____

Nature: TAGS SHALL BE POSTED AT EACH FIRE PROTECTION SYSTEM THAT IS OUT OF SERVICE
Code Section: N.J.A.C. 5:70-3, 901.7.3

TAGS POSTED YES OR NO

DATE _____

Nature: AFFECTED AREAS OR BUILDINGS MUST BE INSPECTED TO DETERMINE INCREASED RISK DUE TO IMPAIRMENT
Code Section: N.J.A.C. 5:70-3, 901.7.4

AREAS AFFECTED _____

Nature: VERIFY IN WRITING THAT INSURANCE COMPANY HAS BEEN NOTIFIED
Code Section: N.J.A.C. 5:70-3, 901.17.4

ATTACHED YES OR NO

Nature: VERIFY IN WRITING THAT ALARM COMPANY HAS BEEN NOTIFIED
Code Section: N.J.A.C. 5:70-3, 901.7.4

ATTACHED YES OR NO

Nature: VERIFY IN WRITING THAT TENANTS/SUPERVISORS IN ALL AFFECTED AREAS HAVE BEEN NOTIFIED OF IMPAIRMENT
Code Section: N.J.A.C. 5:70-3, 901.7.4

ATTACHED YES OR NO

UNITED WATER WILL ONLY BE NOTIFIED AFTER THIS FORM IS FILLED OUT CORRECTLY AND APPROVED BY THE FIRE OFFICIAL

SPACE FOR FIRE OFFICIAL USE ONLY

UNITED WATER NOTIFIED

DATE _____
TIME _____
JOB # _____

SIGNATURE
S. DIVINCENT FIRE OFFICIAL

Fire Alarm
IMPAIRMENT NOTICE!

The fire alarm system is currently under repair and not fully functioning.

Please call 3911 or 911 to immediately report a fire!

Notification will be sent when system is restored. For further information call campus police at ext. 5105 or Fire Safety at ext.3576.

Thank You.