Using this Template

The following template can be used to help your organization develop a written Fire Sprinkler Maintenance Program. This template **cannot** be used as is – you must customize the template to meet the needs of your organization. We have made this template easier for you to customize by adding visual prompts that identify some areas where your input is needed. These are identified by yellow highlighted, red text in the template. You may also change any of the text in the template to meet your organization's needs – for example, department names, job titles and listed responsibilities and procedures.

Example:

<COMPANY NAME>

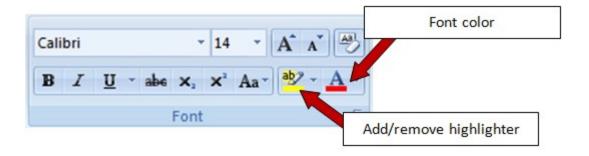
Fire Sprinkler Maintenance Program

becomes

XYZ Company

Fire Sprinkler Maintenance Program

To remove the colored highlighting from your text, left click and drag your mouse over the yellow text and click on the highlighter button from the Font menu. To change the font color to black, select the text and click on the font color button.



To aid you in understanding the need to customize your program, several "Check Your Understanding" text boxes are also included throughout the template. After reading the information in the text box and adding the required information into the template, you may simply right click on the cross arrow box and select "cut."

Disclaimer. This sample safety program template cannot be used as is. You must customize the template to meet the needs of your organization. EMC does not guarantee that this template is or can be relied on for compliance with any law or regulation, assurance against preventable losses, or freedom from legal liability. We make no representations or warranties of any kind whatsoever, either express or implied, in connection with the use of this template. EMC will not be liable for your use of the template as customized by you. All safety programs and policies, including this template and the information you supply to complete it, should be reviewed by your legal counsel and/or risk management staff.



Fire Sprinkler Maintenance Program

Check Your Understanding. If your buildings have fire sprinkler systems, you need a Fire Sprinkler Maintenance Program to help ensure its proper operation. This program addresses overhead sprinkler systems used in many small to midsize commercial facilities but does not address more complex fire extinguishing systems, such as deluge systems, in-rack sprinklers or fixed-chemical extinguishing systems.

NFPA 25 establishes the minimum requirements for the periodic inspection, testing and maintenance of water-based fire protection systems. Compliance with this standard helps maximize system integrity to avoid failure and ensure fast, effective response in a fire emergency. OSHA also requires inspection and testing of automatic sprinkler systems at least annually. For additional information, refer to OSHA 1910.159.

Purpose and Scope

The purpose of this program is to protect <Company Name's> employees from injury or death and to prevent property damage caused by uncontrolled fires in the workplace. We achieve this by ensuring the fire sprinkler systems are correctly installed and properly maintained to provide optimum protection.

This Fire Sprinkler Maintenance Program applies to all Company Name facilities equipped with automatic fire sprinkler systems and to those responsible for system inspection and maintenance. Affected employees are required to follow the procedures outlined in this program. Any deviations from this program must be immediately brought to the attention of the Program Administrator. Company Name Emergency Action Plan covers the procedures for responding to fire emergencies.

Regulations

All <Company Name's> automatic sprinkler systems and fire alarm systems will adhere to:

- NFPA 13 (Standard for the Installation of Sprinkler Systems)
- NFPA 20 (Installation of Stationary Pumps for Fire Protection)
- NFPA 25 (Inspection, Testing and Maintenance of Water-Based Fire Protection Systems)
- NFPA 72 (National Fire Alarm Code)
- NFPA 70 (National Electric Code)

Program Responsibilities

Program Administrator. The Program Administrator is responsible for the following:

- Ensuring necessary departments or functional areas have a copy of the program
- Ensuring employees assigned to inspect sprinkler systems are trained on the program
- Coordinating inspections, tests and repairs performed by a qualified fire sprinkler contractor
- Stopping any unsafe practices that may compromise the sprinkler system effectiveness
- Maintaining records pertaining to the program
- Periodically reviewing the program and updating it as needed

Supervisors. Supervisors are responsible for:

• Notifying the Program Administrator when changes in operations or facility layout may affect sprinkler system coverage and effectiveness

- Identifying and immediately correcting any unsafe conditions affecting the sprinkler system
- Ensuring that all areas containing water-filled piping maintain a minimum of 40° F
- Stopping any unsafe practices that may compromise sprinkler system effectiveness

Maintenance Staff. Maintenance staff is responsible for:

- Inspecting sprinkler systems
- Attending assigned training
- Understanding and following all procedures in this program
- Immediately notifying the Program Administrator of noncompliant conditions

Sprinkler System Labeling

The control value, main drain, test valve, fire department connection and outside alarms will all be labeled.

The control value, main drain and test valve. Permanently marked and weatherproof caution signs are attached to all sprinkler system control valves. The signs will read, "This valve controls fire protection equipment. Do not close until after the fire has been extinguished. Use auxiliary valves when necessary to shut off supply to auxiliary equipment. CAUTION: Automatic alarm may sound if this valve is closed." The sign will also identify the area of the building or system it controls.

Fire Department Connection. Each fire department connection or Siamese connection will be designated by a sign with raised or engraved letters at least 1-inch high, on a plate or fitting, reading: "AUTO SPRINKLER," "OPEN SPRK" or "AUTO SPRK AND STANDPIPE." The fire department connection will be unobstructed and easy to identify.

Outside Alarms. Each outside alarm will have a sign located near the device in a conspicuous position that will be worded as follows: "SPRINKLER FIRE ALARM—WHEN BELL RINGS, CALL FIRE DEPARTMENT OR POLICE."

Hydraulic Nameplate. Hydraulic nameplate(s) will be placed on or near the riser by the installing contractor. This sign will include:

- The location of the design area(s)
- Discharge densities over the design area(s)
- Required flow and residual pressure demand at the base of the riser
- Occupancy or commodity classification
- Maximum permitted storage height and configuration
- Hose stream demand
- Name of the installing contractor

Sprinkler System Inspections

Weekly

- Control valve inspection
 - o In the normal open position
 - Accessible
 - Properly sealed
 - Locked and supervised
 - Free from leaks
 - Provided with appropriate signage identifying the portion of the system controlled

Monthly

- Gauge inspection
 - Good condition and operational
 - o Normal water pressure is being maintained
- Sprinkler clearance
 - o No material stored or other obstructions within 18 inches below the sprinkler heads
 - o No items hanging on sprinkler pipes, sprinklers or sprinkler guards

Quarterly

- Hydraulic nameplate inspection
 - Verify that the hydraulic nameplate is securely attached to the sprinkler riser and is legible
- Fire department connection inspection
 - o Connections are visible and accessible
 - o Couplings or swivels are not damaged and rotate smoothly
 - o Plugs or caps are in place and not damaged
 - o Gaskets are in place and in good condition
 - o Identification signs are in place
 - The check valve is not leaking
 - o The automatic drain valve is in place and operating properly

Sprinkler System Testing

Note: Prior to any testing, the alarm monitoring company must be notified so that they do not dispatch to the site.

Company Name's> sprinkler systems are inspected and tested as per NFPA 25: Standard for the Inspection, Testing and Maintenance of Water-Based Fire Protection Systems.

Check Your Understanding. Some state and local municipalities require certified sprinkler contractors to conduct inspections and testing, while others allow this to be done by trained in-house staff. Testing of dry-type and preaction systems is more complicated than wet types and should be conducted by a certified sprinkler contractor regardless of local ordinances.

The following inspections and tests will be performed by:

<Fire Sprinkler Contractor's Name, Address and Phone Number>

The form in **Appendix B** will be used for documentation.

Monthly

Fire pump start test (if equipped)

Quarterly

- Main drain test
- Inspector's test (alarm test)

Annually

- Alarm inspection
- Hanger and bracing inspection
- Piping inspection
- Sprinkler inspection
 - o Inspect for proper orientation, leakage, corrosion, physical damage
 - o Ensure there are a minimum of two spare sprinklers of each type and temperature rating
 - Ensure a sprinkler wrench is available for each type of sprinkler

- Alarm test
- Main drain test
- Fire pump performance test (if equipped)
- Valve testing and maintenance
- Testing of antifreeze (if equipped)

Fire pumps

- Inspected weekly to verify that the pump assembly is in operating condition
- Tested annually
- A preventive maintenance program will be established in accordance with manufacturer's recommendations

Long Term Tests and Inspections

- A full-flow trip test for dry pipe sprinkler systems every 3 years
- Sprinkler system gauges replaced or tested every 5 years
- System check valves inspected internally every 5 years
- A representative sample of solder-type, extra-high temperature sprinklers (i.e. 325°-375° F with red-colored frame arms) that are exposed to maximum allowable ambient temperatures (ex. boiler rooms) tested every 5 years
- Sprinklers manufactured using fast response elements that have been in service for 20 years must be tested at 10-year intervals
- Dry sprinklers must be tested at 10-year intervals
- Sprinklers subjected to harsh environments, will be replaced or representative samples tested every 5 years

Sprinkler System Repairs

When the system needs to be shut off for repair or maintenance, Fire Sprinkler Contractor Name> will:

- Place a CLOSED tag on the affected control valve
- Notify the alarm monitoring company indicating the estimated duration of shutdown
- Notify the property insurance agent
- Contact local fire department
- Discontinue hazardous operations (cutting, welding or other hot work)
- Bring extra fire extinguishers into deactivated areas
- Initiate a fire watch in all deactivated areas
- Notify all affected parties when the system or component is returned to service

Post-Fire Procedures

After a fire < Company Name > will restore fire sprinklers promptly. The < Fire Sprinkler Contractor's Name > will:

- 1. Verify the control valve is closed
- 2. Open the main drain valve
- 3. Close the main drain valve when water stops flowing from the open sprinklers
- 4. Replace the sprinklers that have operated with new sprinklers of like style and rating
- 5. Open the main control valve and the inspector's test valve located at the remote end of the sprinkler system
- 6. When water flows steadily from the inspector's test valve, close the inspector's test valve
- 7. Conduct a main drain test

Employee and Supervisor Training

Each employee will be trained on sprinkler obstruction rules and a general orientation on the fire detection and suppression systems in their facility. Employees assigned to inspect fire sprinkler systems will be trained on the proper inspection of the systems and their responsibilities. Training can include webinars, online training and on-site training provided by Fire Sprinkler Contractor's Name. All training will be recorded on the Employee Training Record Form located in **Appendix D**.

Periodic Program Review

At least annually, the Program Administrator will conduct a review to assess the plan's effectiveness. The review will consider the following:

- General safety observations
- Lessons learned from fire incidents
- Changes in operations or equipment
- New technology
- Regulatory changes

The annual review will be submitted to senior management using the form in Appendix C.

Record Retention

will maintain sprinkler maintenance inspection records for <3> years. All sprinkler system maintenance and inspection records will be kept by the Program Administrator.

Revision History

<Revision 1 – date>

Monthly YES NO - Are pressure gauges operational? YES NO - Is the control valve open? YES NO - Is the control valve chained and locked? YES NO - Do sprinkler heads have at least 18 inches of clearance? If no to any of these questions, contact the Program Administrator immediately. Quarterly YES NO - Is the hydraulic nameplate attached to the riser? YES NO - Are the fire department connection covers in place? If no to any of these questions, contact the Program Administrator.

Appendix A – Fire Sprinkler System Inspection

Completed by:

		Control Valve(s)		2" Main Drain Test				
		2011101	· a. v c (3)		am Drain i		Inspector's	
			Tamper				Test Time	
		Chained	Switch	Pre-Flow	Residual	Post-Flow	to Alarm	Ву
Test Date	Riser#	and Locked	Operated	Static (psi)	(psi)	Static (psi)	(sec)	Whom
		Yes	Yes	" ,	, ,	, ,	,	
		No	No					
		Yes	Yes					
		No	No					
		Yes	Yes					
		Yes	Yes					
		No	No					
		Yes	Yes No					
		Yes	Yes					
		No	No					
		Yes	Yes No					
		Yes	Yes					
		Yes No	Yes No					
		Yes No	Yes No					
		Yes No	Yes No					
		Yes No	Yes No					
		Yes	Yes No					
		Yes No	Yes No					
		Yes	Yes					
		No	No					

Appendix C – Annual Program Evaluation Report

Date of Evaluation:	Evaluated By (list all present):					
Written Program Reviewed: Yes No						
Do records indicate a need for additional employee training on the Fire Sprinkler Maintenance Program? Yes No						
Have any jobs, processes or areas produced a concern for sprinkler system performance or coverage? Yes No						
If yes, list:						
Is there any record of failure to correct reported sprinkler s	ystem maintenance issues in a timely manner?					
If yes, what corrective action is needed?						
The following content was added/modified/removed from	the written program:					
Comments:						

Appendix D – Training Record – Fire Sprinkler Maintenance Program

The following individuals received training on the Fire Sprinkler Maintenance Program.

Print Name		Sign Name			
he undersigned conducted training in accordance with Company Name's Fire Sprinkler Maintenance Program.					
Print Instructor's Name					
Instructor's Signature					
Instructor's Title					
Date of Training					