

# Form for Inspection, Testing and Maintenance of Wet Pipe Fire Sprinkler Systems



Work Order: \_\_\_\_\_

This form covers the minimum requirements of **NFPA 25 - 2011** for wet pipe fire sprinkler systems connected to water supplies without tanks or fire pumps. Separate forms are available for inspection, testing and maintenance of fire pumps, tanks, and other fire protection systems. More frequent inspection, testing and maintenance may be necessary depending on the conditions of the occupancy and the water supply. The work covered on this form is (check one):      Weekly      Monthly      Quarterly      Annual      Semi-annual      Third Year      Fifth Year  
Owner: \_\_\_\_\_ Owner's Phone Number: \_\_\_\_\_

Owner's Address: \_\_\_\_\_

Property Being Evaluated: \_\_\_\_\_

Property Address: \_\_\_\_\_

Date of Work: \_\_\_\_\_ All responses refer to the current work (inspection, testing and maintenance) performed on this date.

Notes: 1) All questions are to be answered *Yes, No, or Not Applicable*. All "No" answers are to be explained in Part III of this form.

2) Inspection, Testing and Maintenance are to be performed with water supplies (including fire pumps) in service, unless the impairment procedures of Chapter 15 of NFPA 25 are followed.

## Part I – Owner's Section

- |  |     |    |
|--|-----|----|
| A. Is the building occupied?   | Yes | No |
| B. Has the occupancy and hazard of contents remained the same since the last inspection? | Yes | No |
| C. Are all fire protection systems in service?   | Yes | No |
| D. Has the system remained in service without modification since the last inspection?    | Yes | No |
| E. Was the system free of actuation of devices or alarms since the last inspection?      | Yes | No |

The property owner or designated representative shall be responsible for properly maintaining a water-based fire protection system.

The property owner or designated representative shall correct or repair deficiencies or impairments that are found during the inspection, test and maintenance required by this standard (NFPA 25 2011)

See NFPA 25 2011 for all owner requirements.

*\*Signature on work order if available.*

Owner / Representative      Signature and Date

## Part II – Inspector's Section

### A. Inspections

#### 1. Weekly Items

- |  |     |    |     |
|--|-----|----|-----|
| a. Control valves (including backflow preventer isolation valves) supervised with seals passed inspection as described in II.A.2a.below? | Yes | No | N/A |
| b. Relief port on RPZ not discharging?   | Yes | No | N/A |

#### 2. Monthly Inspection Items (in addition to above items)

- |  |     |    |     |
|--|-----|----|-----|
| a. Control valves and valves on backflow preventers with locks or electrical supervision:  |     |    |     |
| 1. In correct (open or closed) position?   | Yes | No | N/A |
| 2. Lock or supervision in place?   | Yes | No | N/A |
| 3. Accessible and free from external leaks?  | Yes | No | N/A |
| 4. Provided with appropriate wrenches?   | Yes | No | N/A |
| 5. Provided with appropriate identification?   | Yes | No | N/A |
| b. Gauges on system in good condition and showing normal water supply pressure?  | Yes | No | N/A |
| c. Alarm valve free from physical damage, trim in correct (open or closed) position and no leakage from retarding chamber or drains? | Yes | No | N/A |

#### 3. Quarterly Inspection Items (in addition to above items)

- |   |     |    |     |
|---|-----|----|-----|
| a. Fire department connections visible, accessible, couplings and swivels not damaged, gaskets in place and in good condition, identification sign(s) in place, check valve is not leaking, clapper in place and operating properly and automatic drain valve in place and operating properly?<br><i>(If plugs or caps are not in place, inspect interior for obstructions)</i> | Yes | No | N/A |
| b. Hydraulic nameplate (calculated system) securely attached to riser and legible?  | Yes | No | N/A |

#### 3. Quarterly Inspection Items (continued)

- |  |     |    |     |
|--|-----|----|-----|
| c. Alarm & supervisory devices not damaged?  | Yes | No | N/A |
| d. Pressure reducing valves in open position, not leaking, with downstream pressure per design criteria, and in good condition with handwheels not broken? | Yes | No | N/A |

#### 4. Annual Inspection Items (in addition to above items)

- |  |     |    |     |
|--|-----|----|-----|
| a. Proper number and type of spare sprinklers?                   | Yes | No | N/A |
| b. Visible sprinklers:   |     |    |     |
| 1. Proper position (upright, pendent, sidewall)?                 | Yes | No | N/A |
| 2. Free of leaks, corrosion and damage?                          | Yes | No | N/A |
| 3. Proper clearance below sprinklers?                            | Yes | No | N/A |
| 4. Free of foreign materials including paint?                    | Yes | No | N/A |
| 5. Liquid in all glass bulb sprinklers?                          | Yes | No | N/A |
| c. Visible Pipe:   |     |    |     |
| 1. In good condition/no external corrosion?                      | Yes | No | N/A |
| 2. No mechanical damage or leaks?                                | Yes | No | N/A |
| 3. No external loads?  | Yes | No | N/A |
| d. Visible pipe hangers and seismic braces not damaged or loose? | Yes | No | N/A |
| e. Sprinkler wrench with spare sprinklers?                       | Yes | No | N/A |
| f. Information sign is attached and legible?                     | Yes | No | N/A |

- |  |     |    |     |
|--|-----|----|-----|
| g. Internal inspection of the pipe performed in the last 5 years (remove a flushing connection and one sprinkler near the end of a branch line)? | Yes | No | N/A |
| <i>(If "No" conduct internal inspection)</i>   |     |    |     |

#### 5. Fifth Year Inspection Items (in addition to above items)

- |   |     |    |     |
|---|-----|----|-----|
| a. Alarm valves and associated strainers, filters and restricted orifices passed internal inspection? | Yes | No | N/A |
| b. Check valves internally inspected, all parts operate properly and are in good condition?           | Yes | No | N/A |
| c. Internal pipe inspection performed per 4.g?  | Yes | No | N/A |

### B. Testing

*Report any failures on Part III of this form.*

#### 1. Quarterly Tests

- |   |     |    |     |
|---|-----|----|-----|
| a. Mechanical waterflow alarm devices passed tests (Water motor alarms actuated and flow observed)? | Yes | No | N/A |
| b. Main drain test for system downstream of backflow device or pressure reducing valve:             |     |    |     |
| 1. Record static pressure      psi and residual pressure      psi                                   |     |    |     |
| 2. Was flow observed?   | Yes | No | N/A |
| 3. Are results comparable to previous tests?  | Yes | No | N/A |

#### 2. Semiannual Tests (in addition to previous items)

- |  |     |    |     |
|--|-----|----|-----|
| a. Valve supervisory switches indicate movement? | Yes | No | N/A |
|--|-----|----|-----|

## 2. Semiannual Tests (continued)

- b. Electrical waterflow alarm devices passed tests (alarms actuated and flow observed)? Yes No N/A

## 3. Annual Tests (in addition to previous items)

- a. Main drain test for systems not tested quarterly:
1. Record static pressure psi and residual pressure psi
  2. Was flow observed? Yes No N/A
  3. Are results comparable to previous tests? Yes No N/A
- b. Post indicating valves opened until spring or torsion felt in the rod then closed back 1/4 turn? Yes No N/A
- c. Are all sprinklers dated 1920 or later? Yes No N/A
- d. Sprinklers with fast response elements 20 years old or more replaced or successfully sample tested in last 10 years? Yes No N/A
- e. Standard response sprinklers 50 years old or more replaced or successfully sample tested in last 10 years? Yes No N/A
- f. Standard response sprinklers 75 years old or more replaced or successfully sample tested in last 5 years? Yes No N/A
- g. Dry-type sprinklers replaced or successfully sample tested in last 10 years? Yes No N/A
- h. Sprinklers subject to harsh environments replaced or successfully sample tested in last 5 years? Yes No N/A
- i. Antifreeze solution specific gravity:
1. Correct at most remote point? Yes No N/A
  2. Correct at interface with wet system? Yes No N/A
  3. Correct at other test points (over 150 gal)? Yes No N/A
  4. Correct type of antifreeze (*recommend collecting and sending in a sample for testing*)? Yes No N/A
- j. All control valves operated through full range and returned to normal position? Yes No N/A
- k. Backflow devices passed forward flow test? Yes No N/A
- l. Pressure reducing valves passed partial flow? Yes No N/A

## 4. Tests for every fifth year (in addition to appropriate items)

- a. Sprinklers above high temperature tested? Yes No N/A
- b. Gauges checked by calibrated gauge or replaced? Yes No N/A
- c. Pressure reducing valves passed full flow test? Yes No N/A

## C. Maintenance

### 1. Regular Maintenance Items

- a. If any sprinkler failed the sampling testing of Parts II.B.3.d, e, f, g or h of this form, were all sprinklers represented by that sample replaced? Yes No N/A
- b. If sprinkler have been replaced, were they proper replacements? Yes No N/A
- c. Marine systems normally having fresh water were drained and refilled twice if raw water got into the system? Yes No N/A
- d. Heat tape inspected per manufacturer's instructions? Yes No N/A
- e. If any of the following were discovered, was an obstruction investigation conducted? Yes No N/A

*Explain reason(s) and obstruction investigation findings in Part III*

1. Defective intake screen on pump supplied from open sources
2. Obstructive material discharged during flow tests
3. Foreign material in dry-pipe valves, check valves or pumps
4. Foreign material in water during drain test or plugging of inspector's test connection
5. Plugging of pipe or sprinklers found during activation or work

### 1. Regular Maintenance Items (continued)

6. Record of broken mains in the vicinity
  7. Abnormally frequent false-tripping of dry-pipe valves
  8. Failure to flush yard piping or surrounding mains following new installation or repairs
  9. System is returned to service after an extended period of time out of service (more than one year)
  10. There is reason to believe the system contains sodium silicate or its derivatives or highly corrosive fluxes in copper pipe
  11. Raw water was pumped into the fire department connection
  12. Pinhole leaks
- f. If conditions were found that require flushing, was flushing of system conducted? Yes No N/A
- g. Was a drain test conducted after opening any closed valves? Yes No N/A
- h. Adjusted, repaired, reconditioned or replaced components had the associated tests and/or inspections required by Table 5.5.1 of NFPA 25 performed? Yes No N/A

### 2. Annual Maintenance Items (in addition to previous items)

- a. Operating stem of all OS&Y valves lubricated, completely closed, and reopened? Yes No N/A
- b. Sprinklers and spray nozzles protecting commercial cooking equipment and ventilating systems replaced except for bulb-type which show no signs of grease build-up? Yes No N/A

**Part III – Comments** (Any “No” answers, test failures or other problems found with the sprinkler system must be explained here. Also note here any products noticed on the system that have been the subject of a recall or replacement program.)

## Part IV – Inspector's Information

Inspector: \_\_\_\_\_ Company: \_\_\_\_\_

Company Address: \_\_\_\_\_

I state that the information on this form is correct at the time and place of my inspection, and that all equipment tested at this time was left in operating condition upon completion of this inspection except as noted in Part III above.

Signature of Inspector: \_\_\_\_\_ Date: \_\_\_\_\_

License or Certification Number (if applicable): \_\_\_\_\_

State License Number - MN: C0075 / IA: FP-036 / WI: 656060