GUIDELINES
FOR
INSPECTION, TESTING AND MAINTENANCE
OF
FIRE PROTECTION & LIFE SAFETY SYSTEMS

(MECHANICAL/ELECTRICAL - FOR CONTRACTORS)

PREFACE

This Guideline is prepared by Qatar Civil Defence to provide a benchmark and a source of information on the inspection, testing and maintenance (ITM) of Fire Protection Systems & Life Safety Systems. Relevant NFPA Codes & Standards and other manufacturer's published instructions are referred to by Qatar Civil Defence in preparing this guideline.

The initial acceptance of the system is significant to ensure that the systems are installed and functioned properly. However, this guideline/manual does not go to the details of the acceptance inspection, testing & commissioning done during the Building Completion Stage. This guide is focused on the inspection, testing and maintenance (ITM) of Fire Protection and Life Safety Systems for existing establishments on the Building Permit Renewal Stage or Maintenance Stage.

Maintaining the Fire Protection and Life Safety Systems in buildings is as critical as was originally inspected, tested and commissioned during the Building Completion Stage. This is because Fire Protection and Life Safety Systems are generally not used on a routine basis the need for proper ITM of these systems is essential for it to work properly when called upon to work especially on emergency situations.

Qatar Civil Defence strives to improve its services to the building industry in Qatar. It will formulate new policies, procedures or introduce improvements to existing systems and such changes / improvements will be published by Qatar Civil Defence once updated.

It is important that various stakeholders in the building industry understand their roles and responsibilities. And Qatar Civil Defence, being the AHJ, hopes that joint efforts from various stakeholders will raise the fire safety standards of the building industry in Qatar.

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GUIDELINES FOR INSPECTION, TESTING AND MAINTENANCE OF FIRE PROTECTION & LIFE SAFETY SYSTEMS (MECHANICAL/ELECTRICAL- FOR CONTRACTORS)

1. GENERAL

1.1 SCOPE

This Section specifies the minimum requirements of inspection, testing and maintenance for Fire Fighting system, Fire Detection & Alarm System, Emergency Lighting System & EPSS in Qatar.

Properties or Buildings required to acquire Renewal of Fire Safety Certification shall be reviewed and subject to the approval of Qatar Civil Defence.

1.2 DEFINITION

INSPECTION - a visual examination of a system or portion thereof to verify that it appears to be in operating condition and is free of physical damage.

TESTING - a procedure used to determine the operational status of a component or system.

COMMISSIONING - A systematic process that provides documented confirmation that building systems function according to the intended design criteria set forth in the project documents and satisfy the owner's operational needs, including compliance with applicable laws, regulations, codes, and standards.

MAINTENANCE - work performed to keep equipment operable or to make repairs.

IMPAIRMENT - A condition where a fire protection system or unit or portion thereof is out of order, and the condition can result in the fire protection system or unit not functioning in a fire event.

EMERGENCY IMPAIRMENT. A condition where a water-based fire protection system or portion thereof is out of order due to an unexpected occurrence, such as a ruptured pipe, an operated sprinkler, or an interruption of the water supply to the system.

PREPLANED IMPAIRMENT. A condition where a water-based fire protection system or a portion thereof is out of service due to work that has been planned in advance, such as revisions to the water supply or sprinkler system piping.

DEFICIENCY - For the purposes of inspection, testing, and maintenance of fire protection & life safety systems, a condition in which a system or portion thereof is damaged, inoperable, or in need of service, but does not rise to the level of an impairment.

CRITICAL DEFICIENCY - A deficiency that, if not corrected, can have an effect on the performance of the fire protection system.

NON CRITICAL DEFICIENCY - A deficiency that does not have an effect on the performance of the fire protection system, but correction is needed for the proper inspection, testing, and maintenance of the system(s).

ACTIVE FIRE PROTECTION SYSTEM - A system that uses moving mechanical or electrical parts to achieve a fire protection goal.

LIFE SAFETY SYSTEMS - Those systems that enhance or facilitate evacuation, smoke control, compartmentalization, and/or isolation.

DESIGN ENGINEER - A group of stakeholders including, but not limited to, representatives of the architect, client, and any pertinent engineers and other designers. UPDA Registered Engineer responsible for the design of Fire Protection and Life Safety Systems of the property.

INSPECTION TESTING AND MAINTENANCE CONTRACTOR - QCD Registered Company for Fire Protection Systems employing QCD Registered Engineers that is with an agreement or contract with the Owner / Owner's Representative to represent them and responsible during regular inspection, testing and maintenance of the property.

REGISTERED ENGINEER - A person registered or licensed to practice engineering in a jurisdiction, subject to all laws and limitations imposed by the jurisdiction. QCD Registered Engineer responsible for both building acceptance inspection/testing and regular inspection, testing and maintenance of the property.

OWNER - Any person, agent, firm, or corporation having a legal or equitable interest in a property, building, or structure.

FACILITY MANAGER - Individual responsible for coordination of safety, security, operation, maintenance and services of the facility or building.

AUTHORITY HAVING JURISDICTION (AHJ) - an organization, office, or individual responsible for enforcing the requirements of a code or standard, or for approving equipment, materials, an installation, or a procedure. (General Directorate of Civil Defence / Qatar Civil Defence).

1.3 REGISTRATION OF CONTRACTOR

The Company responsible for the inspection, testing & maintenance of Fire Protection and Life Safety Systems shall be registered with and on the approved list of Qatar Civil Defence & Ministry of Economy and Commerce.

1.4 REGISTRATION OF ENGINEER

The Engineer in charge for the Supervision / Approval of Installation, Testing, Commissioning and Maintenance of the Fire Protection System shall be registered with and on the approved list of Qatar Civil Defence.

1.5 RESPONSIBILIES

The **Inspection, Testing and Maintenance Contractor's & Registered Engineer's** responsibilities includes the following:

(1) The Inspection, Testing and Maintenance Contractor shall be overall responsible for properly maintaining of the Fire Protection System and Life Safety Systems of the property / building.

The **Facility Manager's** responsibilities includes the following:

(1) Attend systems training sessions.
(2) Review and comment on the Owner's Project Requirements.
(3) Review and comment on the systems manuals.
(4) Organize, coordinate, and implement system inspection, testing, and maintenance as required by the systems manuals.
(5) Evaluates and hires a qualified Inspection, Testing and Maintenance Contractor / Registered Engineer for the building.

RESPONSIBILITY MATRIX

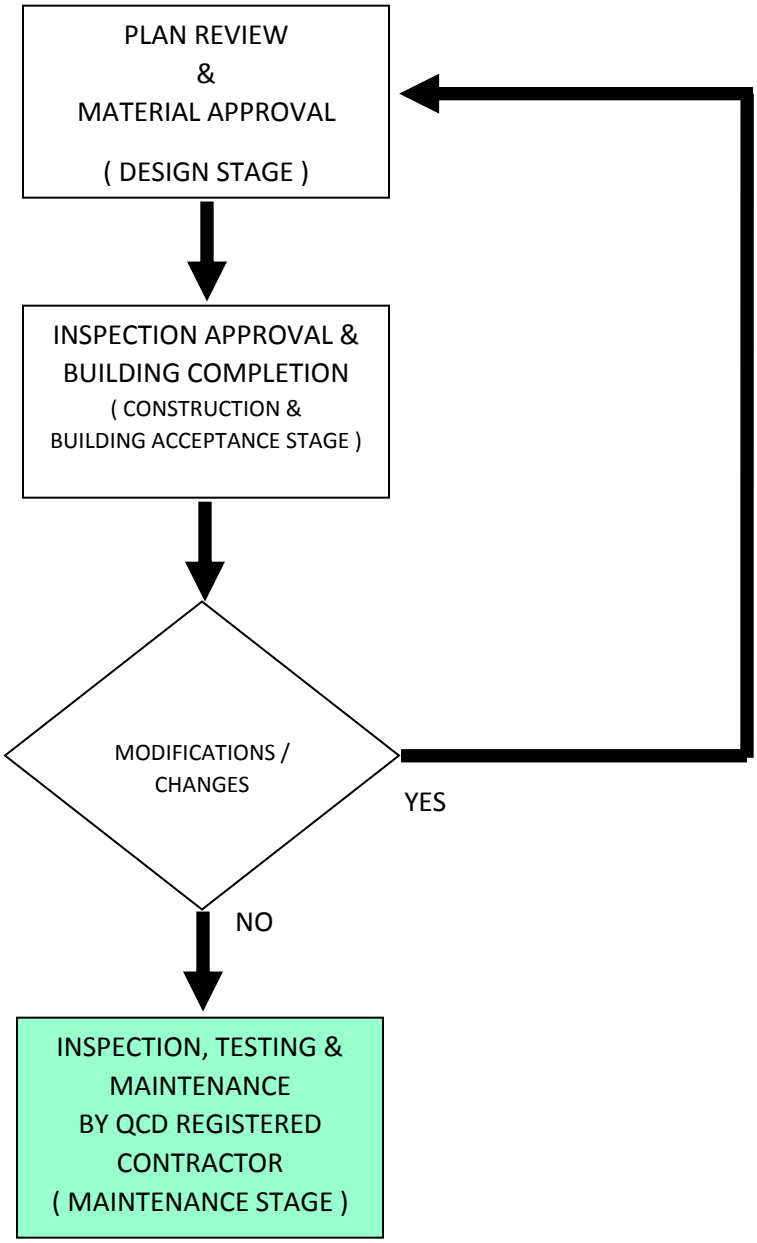
RESPONSIBILITY	FACILITY MANAGER	INSURANCE	ITM CONTRACTOR	QATAR CIVIL DEFENCE (AHJ)
Inspection, Testing & Maintenance (note: including deficiency and impairments)	S / P / I / V	I	L / A / V	S / I / V
Issuance of Fire Safety Certificate	I	I	I	A

Lead (L) - Direct and take overall responsibility for accomplishment
Support (S) - Provide assistance
Participate (P) - Take part in the activity (e.g., attend meetings, witness periodic testing)
Inform (I) - Make the party aware of the activity or result or provide a copy of the deliverable
Verify (V) - Confirm the accuracy or completeness of the task
Accept (A) - Formally accept in writing

1.6 AUTHORITY HAVING JURISDICTION

All works, regulatory requirements and approvals related to Fire Protection and Life Safety Systems in Qatar shall be under the jurisdiction of Qatar Civil Defence. In particular, the issuance of the Fire Safety Certificate Renewal shall be subject to the approval of the Authority Having Jurisdiction.

1.7 FLOWCHART



2. INSPECTION, TESTING AND MAINTENANCE FORMS

2.1 SUMMARY FORM
INSPECTION, TESTING & MAINTENANCE

MINISTRY OF INTERIOR
QATAR CIVIL DEFENSE
FIRE PREVENTION DEPARTMENT

Form SS-ITM-M/E-O-01

SUMMARY FORM - INSPECTION, TESTING & MAINTENANCE (1 OF 2)

APPLICATION NO.: _____ **DATE:** _____

PROPERTY INFORMATION :

Building Name : _____ QCD Building Completion Certificate No : _____

Bldg. No. / Street No. / Zone No. : _____ Office Contact Nos. : _____

Occupancy Classification : _____ Building Height : _____ Building Area : _____

Type of Construction : _____ Hazard Classification : _____

Fire Protection Systems (System Code / Designation) :

- ☐ I – Automatic Sprinkler
- ☐ II – Fire pump
- ☐ III – Water Supply System
- ☐ IV – Standpipe and Hose System
- ☐ V – Fire hydrants
- ☐ VI – Water Mist System
- ☐ VII – Foam System
- ☐ VIII – Fixed Wet Chemical Extinguishing System
- ☐ IX – Clean Agent Fire Extinguishing System
- ☐ X – Fixed Aerosol System
- ☐ XI – Portable Fire Extinguisher
- ☐ XII – Fire Detection and Alarm Systems
- ☐ XIII – Emergency Lighting & EPSS
- ☐ XV – Others _____

FACILITY MANAGER :

Name / QID /Mobile No.: _____ Signature : _____

CONTRACTOR'S INFORMATION :

☐ FF Contractor Name : _____	☐ FA Contractor Name: _____
Company Address : _____	Company Address : _____
Office Contact No. : _____	Office Contact No. : _____
Company Registration No. : _____	Company Registration No. : _____
Contractor's Grade:	Contractor's Grade:
☐ Grade A ☐ Grade B ☐ Grade C ☐ Grade D	☐ Grade A ☐ Grade B ☐ Grade C ☐ Grade D

Engineer's Name / FF or FA	QID	Mobile No.	Signature

Contractor's Stamp / Signature:

ITM Contractor

Stamp / ***Signature:***

Facility Manager

MINISTRY OF INTERIOR
QATAR CIVIL DEFENSE
FIRE PREVENTION DEPARTMENT

Form SS-ITM-M/E-O-01

SUMMARY FORM - INSPECTION, TESTING & MAINTENANCE (2 OF 2)

Building Name:	**Reference No. :**	**Date:**
Owner :		
Contractor :		

Is the Building Occupied ? Y ☐ N ☐ Has Occupancy and Hazard remained the same? Y ☐ N ☐

Are all fire protection systems in service ? Y ☐ N ☐ System has not been modified ? Y ☐ N ☐

Was the system free from actuation of devices or alarms? Y ☐ N ☐ **Explain any NO answer :** ☐

SIGNICANT NOTES / COMMENTS: *(explain any NO answer)*

The Building is ready for QCDD inspection / assessment and has successfully completed all necessary Inspection, Testing and Maintenance Works.

☐ **APPROVED** ☐ **REJECTED**

Engineer's Name / FF or FA	**QID**	**Mobile No.**	**Signature**

Contractor's Stamp / Signature:

ITM Contractor

Stamp / Signature:

Facility Manager

QCD BUILDING PERMIT RENEWAL

Application Requirements:

Records shall be made for all inspections, tests, and maintenance of the system and its components and shall be made available to the authority having jurisdiction.

☐ Original Acceptance Inspection and Test Records

☐ Subsequent / Previous Inspection, Testing and Maintenance Records
(Filled-up Forms with Stamps / Signature of Contractor and Owner)

☐ For Construction QCD Approved Drawings

☐ Others (as required) :
- Inspection, Testing and Maintenance Records / Procedures from Manufacturer's / Specialists
- Operation and Maintenance (O&M) Manuals
- Manufacturer's Datasheets
- Mechanical & Electrical Calculations (such as Hydraulic calculations, Battery Calculations etc.)

2.2
I. AUTOMATIC SPRINKLER SYSTEMS

AUTOMATIC SPRINKLER SYSTEMS

Legend

Semi-Annual | Annually | MR

Remarks

Y - Satisfactory N – Unsatisfactory N/A – Not Applicable

Notes

1. Fill up color shaded cells with “Y”, “N”, or “N/A”.
2. Additional notes can be added at the last page of this guide.
3. Methods / Frequencies WITHOUT COLOR are referred to Manufacturer’s Recommendation / Technical Specialists.
4. Methods of Inspection, Testing and Maintenance shall be based on NFPA 13, NFPA 25, NFPA 3, NFPA Fire Protection System – Inspection, Testing and Maintenance Manual and/or Manufacturer’s recommendation.

Code	Item	Frequency (Y, N, N/A)	
		CONTRACTOR	
		Semi-annually	Annually
I.i	**INSPECTION**		
I.i1	Inspect control valves.		
I.i2	Dry Pipe, Pre-action, and Deluge Sprinkler Systems		
I.i3	Alarm Valves and System Riser Check Valves		
I.i4	Dry Pipe Pre-action, and Deluge Valves		
I.i5	Pre-action Systems		
I.i6	Backflow Prevention Devices		
I.i7	Inspect alarm devices (water flow device or pressure switch)		
I.i8	Inspect fire department connection		
I.i9	Pressure Reducing and Relief Valves		
I.i10	Inspect sprinklers and piping		
I.i11	Inspect pipe hangers and seismic braces		
I.i12	Inspect information signs		
I.i13	Verify supply of spare sprinklers and wrench.		

I.i14	Inspect interior of dry pipe and pre-action valves when the trip test is conducted.				
I.i15	Open flushing connection. Inspect pipe internally. (every 5 years)				
I.i16	Internally inspect wet pipe alarm valves, pre-action valves, dry pipe valves and associated strainers, filters, and restrictive orifices. (every 5 years)				
I.t	**TESTING**				
I.t1	Main drain test				
I.t2	Fire Department Connections				
I.t3	Wet Pipe System Flow Alarm				
I.t4	Water Flow Alarm				
I.t5	Dry Pipe Priming Level				
I.t6	Dry Pipe System Low Air Pressure Alarm				
I.t7	Wet Pipe System Flow Alarm				
I.t8	Quick Opening Device				
I.t9	Preaction System Flow Alarm				
I.t10	Deluge System Flow Alarm				
I.t11	Control Valves				
I.t12	Cold Weather Valves				
I.t13	Dry Pipe Systems				
I.t14	Deluge Systems				
I.t15	Preaction Systems				
I.t14	Main drain test				
I.t15	Wet Pipe Systems (test mechanical flow alarm)				
I.t16	Dry Pipe Systems				
I.t17	Pre-action Sprinkler System (trip test)				
I.t18	Deluge Sprinkler System (trip test)				

I.t19	Cooking Equipment Sprinklers (fusible link type)		
I.t20	Full flow trip test dry pipe valve. (every 3 years)		
I.t21	Test or replace gauges. (every 5 years)		
I.t22	Replace dry type sprinklers. (every 10 years)		
XII.m	**MAINTENANCE**		
I.m1	Maintain air dryers in accordance with the manufacturer's instructions.		
I.m2	Maintain compressors in accordance with the manufacturer's instructions.		
I.m3	Spray Cooking Areas. Replace sprinkler covering when deposit or residue accumulates.		
I.m4	Lubricate all valve stems.		
I.m5	Clean strainers if provided.		
I.m6	Dry Pipe, Pre-action, and Deluge Systems		
I.m7	Drain all low point drains (drum drips).		
I.m8	Maintain valve in accordance with manufacturer's instructions.		
I.m9	Backflow Prevention Assemblies (in accordance with manufacturer's instructions.		
I.m10	Cooking Equipment. Replace sprinklers and automatic spray nozzles		
XII.m1	Refer to manufacturer's instruction for complete maintenance procedure. (Note: May include all necessary daily or weekly activities to complete ITM procedures. Also, may include preventive and corrective maintenance as per recommendation of manufacturer or specialists.)		

Code	Notes / Comments / Resolution: [Key in the code at the beginning of each note (I, II, III, IV, V, or VI).]

I _____ , hereby declare that the information filled-up on this form is true and correct and that all system and equipment is operational except as noted in the comments section of this guide.

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

AUTOMATIC SPRINKLER SYSTEMS
GENERAL INFORMATION FORM - 1

Building Name: _____ **Date:** _____
Location: _____

General
Systems Designation: _____
Location of Sprinkler Valve: _____
Type of Sprinkler System ☐ Wet ☐ Dry ☐ Deluge ☐ Pre-action
Make and Model of Sprinkler Valve: _____
Is the building fully sprinklers? ☐YES ☐NO
Is the entire sprinkler systems in service? ☐YES ☐NO
Has the sprinkler system been modified since last inspection? ☐ YES ☐ NO

Valves
How are valves supervised? ☐Sealed ☐Locked ☐Tampered Switch
Are valves identified with signs? ☐YES ☐NO

Pumps
Is fire pump? ☐ Diesel ☐ Electric ☐ Gasoline ☐Others _____
When was the fire pump last inspected? _____
Is the fire pump in good condition? ☐YES ☐NO

Water Supply
When was the last water supply test made? _____
Are reservoirs, tanks or pressure tanks in good conditions? ☐YES ☐NO

Fire Department Connections
Location? _____
Are identification signs provided? ☐YES ☐NO

Wet System
Is system hydraulically calculated? ☐YES ☐NO

Dry System
Remarks: _____

Deluge Systems
Remarks: _____

Pre-action System
Remarks: _____

SN	SIGNIFICANT COMMENTS
☐ APPROVED	☐ REJECTED

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

MINISTRY OF INTERIOR
QATAR CIVIL DEFENSE
FIRE PREVENTION DEPARTMENT

Form SS-ITM-M/E-O-01

AUTOMATIC SPRINKLER SYSTEMS
INSPECTION FORM – 2 (SEMI ANNUALLY)

Year: _____ System: _____
Location: _____

1. Date of inspection
2. Inspector's Name / Signature
3. If valves as sealed, note "YES" in the block. If they are not sealed, reseal and note "resealed" in this block.

4-6. Record pressure readings in psi (bar). A loss of more than 10 percent should be investigated.

7. Record any comments about the system that the inspector believes to be significant. Place a number in this box and the corresponding note on the significant comment box below.

Date 1	Inspector 2	Valves Sealed 3	Dry Pipe Valve 4		Pre-action Valve 5		Deluge Valve 6	Comments 7
			Air Pressure	Water Pressure	Air Pressure	Water Pressure	Water Pressure	

SN	SIGNICANT COMMENTS

☐ **APPROVED** ☐ **REJECTED**

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

MINISTRY OF INTERIOR
QATAR CIVIL DEFENSE
FIRE PREVENTION DEPARTMENT

Form SS-ITM-M/E-O-01

AUTOMATIC SPRINKLER SYSTEMS
INSPECTION FORM – 3 (SEMI ANNUALLY)

Year: _____ System: _____
Location: _____

1. Date of inspection
2. Inspector's Name / Signature
3. Confirm valves are open. If valves are locked, note "yes" in this block. If they are not locked, relock and note "relocked" in this block/.
4. Inspect alarm valves to ensure there is no leakage from retard chamber or alarm and no physical damage. Confirm that trim valves are in appropriate closed or open position.
5. Record pressure readings in psi (bar). A loss more than 10 percent should be investigated.
6. Record any notes about the system that the inspector believes to be significant. Place a number in this block and number the corresponding note on the significant comment form.

Date 1	Inspector 2	Valves (Open, Locked or Tampered) 3	Alarm Valves 4	Water Pressure 5	Comments 6

SIGNICANT COMMENTS
☐ **APPROVED** ☐ **REJECTED**

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

AUTOMATIC SPRINKLER SYSTEMS
INSPECTION & TESTS FORM - 4 (SEMI ANNUALLY)

Year: _____ System: _____
Location: _____

Remarks
Y - Satisfactory N – Unsatisfactory N/A – Not Applicable

SN	Activity	SA1	SA2
	Main Drain Test (where water supply is though backflow preventer or pressure reducing value)		
1T	Record the static water supply pressure in psi (bar) as indicated on the lower pressure gauge. Open main drain and allow water flow to stabilize.		
2T	Record the residual water supply pressure while water is flowing from the maid drain as indicated on the lower pressure gauge in psi (bar). Close the main drain slowly		
	Fire Department Connections		
3T	Verify connection is visible and accessible, not damaged, caps or plugs are in place, identification sign is in place, and automatic drain is working properly		
	Wet Pipe System Flow Alarm		
4T	Test the flow alarms by opening the inspector's test valve (notify alarm company to avoid false alarm)		
	Water Flow Alarm		
5T	Test mechanical water flow devices (e.g. water motor gong)		
	Dry Pipe Priming Level		
6T	Check dry priming water level by opening the test valve and checking for a small amount of water to discharge. If no water flows out of the test line, add priming water.		
	Dry Pipe System Low Air Pressure Alarm		
7T	Close the water supply valve and open inspector's test valve to reduce air pressure. (Do not reduce air pressure to trip the dry pipe valve.) Confirm operation of low pressure alarm, record air pressure at which low pressure alarm activated, close inspectors test, allow air pressure to rise to normal, then open water supply valve.		
	Wet Pipe System Flow Alarm		
8T	Open the alarm bypass valve. (Notify alarm company to avoid false alarms)		
	Quick Opening Device		
9T	Test in accordance with manufacturer's instructions.		
	Pre-action System Flow Alarm		
10T	Open alarm by-pass valve. (Notify alarm company to avoid false alarms)		
	Deluge System Flow Alarm		

11T	Open alarm by-pass valve. (Notify alarm company to avoid false alarms)		
	Control Valves		
12T	Close valves and reopen until spring or tension is felt - back valve one quarter turn		
	Hydraulic Nameplate		
1I	If the system is hydraulically calculated, assure nameplate is legible and securely attached to riser		

SN	**SIGNIFICANT COMMENTS**
☐ **APPROVED**	☐ **REJECTED**

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

AUTOMATIC SPRINKLER SYSTEMS
INSPECTION & TESTS FORM - 5 (ANNUALLY)

Year : _____ System : _____
Location : _____

Remarks
Y - Satisfactory N – Unsatisfactory N/A – Not Applicable

SN	ACTIVITY	REMARKS
General Condition		
1I	Inspect sprinklers, sprinkler piping, pipe hangers, and seismic braces to make sure they are in good condition.	☐ **Y** ☐ **N** ☐ **N/A**
2I	Verify supply of spare sprinklers.	☐ **Y** ☐ **N** ☐ **N/A**
Maintain Valves		
1M	Valves should be maintained, including exercising each valve and lubricating each freeze level.	☐ **Y** ☐ **N** ☐ **N/A**
Clean Strainers		
1M	Shut the water supply valve and remove the strainer for thorough cleaning.	☐ **Y** ☐ **N** ☐ **N/A**
Main Drain Test		
1T	Record the static water supply pressure in psi (bar) as indicated on the lower pressure gauge. Open the main drain and allow water flow to stabilize.	☐ **Y** ☐ **N** ☐ **N/A**
2T	Record the residual water supply pressure while water is flowing from the main drain as indicated on the lower pressure gauge in psi (bar). Close the main drain (slowly).	☐ **Y** ☐ **N** ☐ **N/A**
Dry Pipe System		
3T	Trip test the dry pipe system. Record the time from the opening of the inspector's test valve until the dry pipe valve trips. (Refer to manufacturer's instruction)	☐ **Y** ☐ **N** ☐ **N/A**
4T	Internally inspect dry pipe valve.	☐ **Y** ☐ **N** ☐ **N/A**
5T	Test air pressure maintenance device.	☐ **Y** ☐ **N** ☐ **N/A**

6T	Inspect/test low temperature alarm in valve room. (if provided)	☐ **Y**	☐ **N**	☐ **N/A**
Preaction Sprinkler System				
7T	Trip test the preaction system. (Refer to manufacturer's instruction)	☐ **Y**	☐ **N**	☐ **N/A**
1M	Internally inspect preaction valve.	☐ **Y**	☐ **N**	☐ **N/A**
1M	Test automatic air pressure maintenance device (if provided) at time of the trip test.	☐ **Y**	☐ **N**	☐ **N/A**
1M	Inspect/test low temperature alarm in valve room (if provided)	☐ **Y**	☐ **N**	☐ **N/A**
Deluge Sprinkler System				
1M	Trip test the deluge system. (Refer to manufacturer's instructions.)	☐ **Y**	☐ **N**	☐ **N/A**
1M	Record time from activation of detector until water is discharged.	☐ **Y**	☐ **N**	☐ **N/A**
1M	Check to see that water discharge pattern is adequate.	☐ **Y**	☐ **N**	☐ **N/A**
1M	Record water pressure at hydraulically most remote sprinkler.	☐ **Y**	☐ **N**	☐ **N/A**
1M	Record water pressure at deluge valve.	☐ **Y**	☐ **N**	☐ **N/A**
1M	Internally deluge valve.	☐ **Y**	☐ **N**	☐ **N/A**
1M	Inspect/test low temperature alarm. (if provided)	☐ **Y**	☐ **N**	☐ **N/A**
Cooking Equipment Sprinklers				
1M	Replace sprinklers with fusible links.	☐ **Y**	☐ **N**	☐ **N/A**
1M	Record water pressure at deluge valve.	☐ **Y**	☐ **N**	☐ **N/A**
1M	Internally inspect deluge valve.	☐ **Y**	☐ **N**	☐ **N/A**
1M	Inspect/test low temperature alarm. (if provided)	☐ **Y**	☐ **N**	☐ **N/A**
1M	Replace sprinklers with fusible links.	☐ **Y**	☐ **N**	☐ **N/A**

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

AUTOMATIC SPRINKLER SYSTEMS
INSPECTION & TESTS FORM - 6 (FIVE (5) -YEAR)

Year : _____ **System :** _____
Location : _____

Remarks
Y - Satisfactory N – Unsatisfactory N/A – Not Applicable

SN	ACTIVITY	5	10	15	20	25	30	35	40	45	50
1I	**Alarm Valve Internal Inspection** Verify that all components operate properly, move freely and are in good condition.										
2I	**Check Valve Internal Inspection** Verify that all components operate properly, move freely and are in good condition.										
3I	Obstruction Investigation (every 5 years or as needed)										
1T	Calibrate Pressure Gauges										
2T	Test sample of Extra High Temperature Sprinklers										

SN	SIGNIICANT COMMENTS
APPROVAL	☐ **APPROVED** ☐ **REJECTED**

(Signature above Printed Name) / Date
ITM Contractor

(Signature above Printed Name) / Date
Facility Manager

2.2
II. FIRE PUMP SYSTEM

FIRE PUMPS

Legend

Semi-Annual | Annually | MR

Remarks

Y - Satisfactory N – Unsatisfactory N/A – Not Applicable

Notes

1. Fill up color shaded cells with “Y”, “N”, or “N/A”.
2. Additional notes can be added at the last page of this guide.
3. Methods / Frequencies WITHOUT COLOR are referred to Manufacturer’s Recommendation / Technical Specialists.
4. Methods of Inspection, Testing and Maintenance shall be based on NFPA 20, NFPA 25 and NFPA Fire Protection System Inspection, Testing and Maintenance Manual and/or Manufacturer’s recommendation.

Code	Item	Frequency (Y, N, N/A)	
		CONTRACTOR	
		Semi-annually	Annually
I.i	**INSPECTION**		
II.i1	Heat in Pump Room is 40 deg. F		
II.i2	Operating louver in pump room appear operational		
II.i3	Pump suction, discharge, and bypass valves are open		
II.i4	No leaks in piping or hoses		
II.i5	Fire pump leaking one drop of water per second at seals		
II.i6	Suction line pressure is normal		
II.i7	System line pressure is normal		
II.i8	Wet pit suction screens are unobstructed and in place		
II.i9	Suction reservoir is full		
II.i10	Water flow test valves are in the closed position		

II.i11	Controller pilot light (power on) is illuminated		
II.i12	Transfer switch normal, power lights illuminated		
II.i13	Isolating switch for standby power is closed		
II.i14	Reverse phase alarm light is not illuminated		
II.i15	Normal phase rotation light is illuminated		
II.i16	Oil level in vertical motor sight is normal		
II.i17	Diesel fuel tank is at least two-thirds full		
II.i18	Controller selector switch is in "auto" position		
II.i19	Voltage readings for batteries (2) are normal		
II.i20	Charging current readings are normal for batteries		
II.i21	Pilot lights for batteries are on or battery failure pilot lights are off.		
II.i22	All alarm pilots lights are off		
II.i23	Record engine running time from meter		
II.i24	Oil level is normal in right angle gear drive pumps		
II.i25	Power to jockey pump is provided		
II.i26	Crankcase oil level is normal		
II.i27	Cooling water level is normal		
II.i28	Electrolyte level in batteries is normal		
II.i29	Battery terminals are free of corrosion		
II.i30	Water jacket heater is operational		
II.i31	For steam driven pumps, steam pressure is normal Examine exhaust system for leaks		
II.i32	Check lube oil heater for operation (diesels pumps)		
II.i33	Drain condensate trap of cooling system		

II.i34	Check for water in diesel fuel tank				
II.i35	Removed battery corrosion, clean and dry battery case				
II.i36	Check battery charger and charger rate				
II.i37	Equalize charge in battery system				
II.i38	Exercise isolating switch and circuit breaker				
II.i39	Inspect, clean and test circuit breakers				
II.i40	Check crankcase breather on diesel pump for proper operation.				
II.i41	Clean water strainer in coding system for diesel fire pump.				
II.i42	Check exhaust system insulation for integrity.				
II.i43	Check exhaust system clearance to combustibles to prevent fire hazards.				
II.i44	Check battery terminals to ensure they are clean and tight.				
II.i45	Check electrical wiring for chafing where subject to movement.				
II.i46	Check operation of safety devices and alarms.				
II.i47	All Pumps Hydraulic System				
II.i48	Electric Fire Pumps Only				
II.i49	Steam Fire Pumps Only				
II.i50	Diesel Fire Pumps Only				
II.i51	System Components				
II.t	**TESTING**				
II.t1	Operate diesel fire pump for 30 minutes				
II.t2	Check packing gland tightness (slight leak at no flow).				
II.t3	Record suction pressure from gauge in PSI.				
II.t4	Record discharge pressure from gauge in PSI.				
II.t5	Adjust gland nuts if necessary				
II.t6	Check for unusual noise or vibration				

II.t7	Check packing boxes, bearing, or pump casing for overheating		
II.t8	Record pump starting pressure		
II.t9	Observe time for motor to accelerate to full speed (diesel and steam pumps)		
II.t10	For reduced voltage or reduced current starting, record time controller is on first step		
II.t11	Record time pump runs after starting for pumps having automatic stop feature.		
II.t12	Record time for diesel engine to crank		
II.t13	Record time for diesel engine to reach running speed		
II.t14	Check oil pressure gauge, speed indicator, and water and oil temperatures while engine is running.		
II.t15	Check heat exchanger for cooling water flow		
II.t16	Record steam pressure for steam operated pump		
II.t17	Check water tank float switch		
II.t18	Check solenoids for proper operation		
II.t19	Operate speed governor (internal combustion engine only)		
II.t20	Check controller alarms		
II.t21	Exercise isolating switch and circuit breaker		
II.t22	Test antifreeze to determine protection level		
II.t23	Test batteries for specific gravity or state of charge		
II.t24	Test circuit breakers and fuses for proper operation		
II.t25	Operate electric pump for 10 minutes		
II.t26	Operate manual starting means		
II.t27	Operate safety devices and alarms		

II.t28	Annual Performance Tests		
II.m	**MAINTENANCE**		
II.m1	Refer to manufacturer's instruction for complete maintenance procedure. (Note 1: May include all necessary daily or weekly activities to complete ITM procedures. Also, may include preventive and corrective maintenance as per recommendation of manufacturer or specialists.) (Note: 2: Systems services and checks may include but not limited to hydraulic systems, mechanical transmission, motor, engine, electrical systems and controllers)		

Code	Notes / Comments / Resolution: [Key in the code at the beginning of each note (I, II, III, IV, V, or VI).]
☐ **APPROVED**	☐ **REJECTED**

I _____ , hereby declare that the information filled-up on this form is true and correct and that all system and equipment is operational except as noted in the comments section of this guide.

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

FIRE PUMP
INSPECTION AND TEST FORM - 1 (SEMI ANNUALLY)

Building Name:
Location:
Year:

Remarks

Y - Satisfactory N – Unsatisfactory N/A – Not Applicable

Notes

1. Fill up cells with “Y”, “N”, or “N/A”.
2. Significant and Additional comments can be added at the last page of this guide.
3. Methods of Inspection, Testing and Maintenance shall be based on NFPA 20, NFPA 25 and NFPA Fire Protection System Inspection, Testing and Maintenance Manual and/or Manufacturer’s recommendation.

SN	INSPECTION	SA1	SA2
1I	Heat in Pump Room is 40 deg. F		
2I	Operating louver in pump room appear operational		
3I	Pump suction, discharge, and bypass valves are open		
4I	No leaks in piping or hoses		
5I	Fire pump leaking one drop of water per second at seals		
6I	Suction line pressure is normal		
7I	System line pressure is normal		
8I	Wet pit suction screens are unobstructed and in place		
9I	Suction reservoir is full		
10I	Water flow test valves are in the closed position		
11I	Controller pilot light (power on) is illuminated		
12I	Transfer switch normal, power lights illuminated		
13I	Isolating switch for standby power is closed		
14I	Reverse phase alarm light is not illuminated		
15I	Normal phase rotation light is illuminated		
16I	Oil level in vertical motor sight is normal		

17I	Diesel fuel tank is at least two-thirds full		
18I	Controller selector switch is in "auto" position		
19I	Voltage readings for batteries (2) are normal		
20I	Charging current readings are normal for batteries		
21I	Pilot lights for batteries are on or battery failure pilot lights are off.		
22II	All alarm pilots lights are off		
23I	Record engine running time from meter		
24I	Oil level is normal in right angle gear drive pumps		
25I	Power to jockey pump is provided		
26I	Crankcase oil level is normal		
27I	Cooling water level is normal		
28I	Electrolyte level in batteries is normal		
29I	Battery terminals are free of corrosion		
30I	Water jacket heater is operational		
31I	For steam driven pumps, steam pressure is normal Examine exhaust system for leaks		
32I	Check lube oil heater for operation (diesels pumps)		
33I	Drain condensate trap of cooling system		
34I	Check for water in diesel fuel tank		
SN	**TESTING**		
1T	Operate diesel fire pump for 30 minutes		
2T	Check packing gland tightness (slight leak at no flow).		
3T	Record suction pressure from gauge in PSI.		
4T	Record discharge pressure from gauge in PSI.		
5T	Adjust gland nuts if necessary		
6T	Check for unusual noise or vibration		
7T	Check packing boxes, bearing, or pump casing for overheating		
8T	Record pump starting pressure		

9T	Observe time for motor to accelerate to full speed (diesel and steam pumps)		
10T	For reduced voltage or reduced current starting, record time controller is on first step		
11T	Record time pump runs after starting for pumps having automatic stop feature.		
12T	Record time for diesel engine to crank		
13T	Record time for diesel engine to reach running speed		
14T	Check oil pressure gauge, speed indicator, and water and oil temperatures while engine is running.		
15T	Check heat exchanger for cooling water flow		
16T	Record steam pressure for steam operated pump		
17T	Check water tank float switch		
18T	Check solenoids for proper operation		
19T	Operate speed governor (internal combustion engine only)		
20T	Check controller alarms		

SN	**SIGNICANT COMMENTS**

☐ **APPROVED** ☐ **REJECTED**

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

FIRE PUMP
INSPECTION AND TEST FORM – 2 (SEMI ANNUALLY)

Building Name:
Location:
Year:

Remarks

Y - Satisfactory N – Unsatisfactory N/A – Not Applicable

Notes

1. Fill up cells with “Y”, “N”, or “N/A”.
2. Significant and Additional comments can be added at the last page of this guide.
3. Methods of Inspection, Testing and Maintenance shall be based on NFPA 20, NFPA 25 and NFPA Fire Protection System Inspection, Testing and Maintenance Manual and/or Manufacturer’s recommendation.

SN	INSPECTION	SA1	SA2
1I	Removed battery corrosion, clean and dry battery case		
2I	Check battery charger and charger rate		
3I	Equalize charge in battery system		
4I	Exercise isolating switch and circuit breaker		
5I	Inspect, clean and test circuit breakers		
SN	**TESTING**		
1T	Exercise isolating switch and circuit breaker		
2T	Test antifreeze to determine protection level (if applicable)		
3T	Test batteries for specific gravity or state of charge		
4T	Test circuit breakers and fuses for proper operation		
5T	Operate electric pump for 10 minutes		

SN	SIGNICANT COMMENTS

APPROVAL	☐ **APPROVED** ☐ **REJECTED**

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

FIRE PUMP
INSPECTION AND TEST FORM - 3 (SEMI ANNUALLY)

Building Name:
Location:
Year:

Remarks

Y - Satisfactory N – Unsatisfactory N/A – Not Applicable

Notes

1. Fill up cells with “Y”, “N”, or “N/A”.
2. Significant and Additional comments can be added at the last page of this guide.
3. Methods of Inspection, Testing and Maintenance shall be based on NFPA 20, NFPA 25 and NFPA Fire Protection System Inspection, Testing and Maintenance Manual and/or Manufacturer’s recommendation.

SN	INSPECTION	SA1	SA2
1I	Check crankcase breather on diesel pump for proper operation.		
2I	Clean water strainer in coding system for diesel fire pump.		
3I	Check exhaust system insulation for integrity.		
4I	Check exhaust system clearance to combustibles to prevent fire hazards.		
5I	Check battery terminals to ensure they are clean and tight.		
5I	Check electrical wiring for chafing where subject to movement.		
5I	Check operation of safety devices and alarms.		

SN	SIGNICANT COMMENTS
☐ APPROVED ☐ REJECTED	

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

FIRE PUMP
INSPECTION, TESTING & MAINTENACE FORM (SEMI-ANNUALLY)

Building Name :
Location :
Year :

Remarks
Y - Satisfactory N – Unsatisfactory N/A – Not Applicable

Notes
1. Fill up cells with “Y”, “N”, or “N/A”.
2. Significant and Additional comments can be added at the last page of this guide.
3. Methods of Inspection, Testing and Maintenance shall be based on NFPA 20, NFPA 25 and NFPA Fire Protection System Inspection, Testing and Maintenance Manual and/or Manufacturer’s recommendation.

SN	INSPECTION	SA1	SA2
1I	Inspect flexible exhaust section of diesel exhaust piping.		
2I	Examine wire insulation for breaks, cracks or chafing.		
SN	**TESTING**		
1T	Test antifreeze level. (if applicable)		
2T	Test all safeties and alarms for proper operation.		
3T	Operate manual starting means.		
4T	Operate safety devices and alarms.		
SN	**MAINTENANCE**		
1M	Clean boxes, panels and cabinets.		
2M	Clean strainer.		
3M	Clean dirt leg.		
4M	Clean crankcase breather.		
5M	Clean and tighten battery terminals.		
6M	Clean water strainer of cooling system.		

SN	SIGNICANT COMMENTS
APPROVAL	☐ **APPROVED** ☐ **REJECTED**

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

FIRE PUMP
INSPECTION & MAINTENACE FORM (ANNUALLY)

Building Name :
Location :
Year :

Remarks
Y - Satisfactory N – Unsatisfactory N/A – Not Applicable

Notes
1. Fill up cells with “Y”, “N”, or “N/A”.
2. Significant and Additional comments can be added at the last page of this guide.
3. Methods of Inspection, Testing and Maintenance shall be based on NFPA 20, NFPA 25 and NFPA Fire Protection System Inspection, Testing and Maintenance Manual and/or Manufacturer’s recommendation.

SN	ACTIVITY	REMARKS
All Pumps – Hydraulic Systems		
1I	Suction pressure gauge: _____ psi (bar)	☐ **Y** ☐ **N** ☐ **N/A**
2I	Discharge pressure gauge: _____ psi (bar)	☐ **Y** ☐ **N** ☐ **N/A**
3I	Pump starting pressure from pressure switch in controller: _____ psi (bar)	☐ **Y** ☐ **N** ☐ **N/A**
4I	Pump run time from controller: _____ minutes	☐ **Y** ☐ **N** ☐ **N/A**
6I	Suction line control valves are sealed open.	☐ **Y** ☐ **N** ☐ **N/A**
7I	Discharge line control valves are sealed open.	☐ **Y** ☐ **N** ☐ **N/A**
8I	Bypass line control valves are sealed open.	☐ **Y** ☐ **N** ☐ **N/A**
9I	All control valves are accessible	☐ **Y** ☐ **N** ☐ **N/A**
10I	Suction reservoir is full.	☐ **Y** ☐ **N** ☐ **N/A**
11I	Pump shaft seals dripping water. (1 drop per second)	☐ **Y** ☐ **N** ☐ **N/A**
12I	Systems is free of vibration or unusual noise when running.	☐ **Y** ☐ **N** ☐ **N/A**
13I	Packing boxes, bearings, and pump casing are free from overheating.	☐ **Y** ☐ **N** ☐ **N/A**
14I	Check pump shaft end play.	☐ **Y** ☐ **N** ☐ **N/A**
15I	Check pump coupling alignment.	☐ **Y** ☐ **N** ☐ **N/A**

Electric Fire Pumps				
16I	Isolating switch is closed to standby power source.	☐ **Y**	☐ **N**	☐ **N/A**
17I	Normal phase rotation pilot light is on.	☐ **Y**	☐ **N**	☐ **N/A**
18I	Reverse phase rotation pilot light is off.	☐ **Y**	☐ **N**	☐ **N/A**
19I	Oil level in vertical motor sight glass is in normal range.	☐ **Y**	☐ **N**	☐ **N/A**
20I	Operate circuit breaker.	☐ **Y**	☐ **N**	☐ **N/A**
21I	Check voltmeter and ammeter for accuracy (5 %)	☐ **Y**	☐ **N**	☐ **N/A**
22I	Check for corrosion on any printed circuit boards.	☐ **Y**	☐ **N**	☐ **N/A**
23I	Check for cracked electrical insulation.	☐ **Y**	☐ **N**	☐ **N/A**
24I	Check for leaks in plumbing parts.	☐ **Y**	☐ **N**	☐ **N/A**
25I	Check for water in electrical parts.	☐ **Y**	☐ **N**	☐ **N/A**
Diesel Fire Pumps				
26I	Diesel tank is two thirds full	☐ **Y**	☐ **N**	☐ **N/A**
27I	Batteries are fully charged	☐ **Y**	☐ **N**	☐ **N/A**
28I	Battery charger is operating properly.	☐ **Y**	☐ **N**	☐ **N/A**
29I	Battery terminal are clean.	☐ **Y**	☐ **N**	☐ **N/A**
30I	Battery state of charge is checked.	☐ **Y**	☐ **N**	☐ **N/A**
31I	Battery pilot lights on.	☐ **Y**	☐ **N**	☐ **N/A**
32I	Battery failure pilot lights are off.	☐ **Y**	☐ **N**	☐ **N/A**
33I	Engine running time meter is recording pump operation properly.	☐ **Y**	☐ **N**	☐ **N/A**
34I	Oil level in right angle gear drive is normal	☐ **Y**	☐ **N**	☐ **N/A**
35I	Diesel engine oil level is full	☐ **Y**	☐ **N**	☐ **N/A**
36I	Check for water in the fuel system	☐ **Y**	☐ **N**	☐ **N/A**
37I	Check tank vents and overflow piping for obstructions	☐ **Y**	☐ **N**	☐ **N/A**
38I	Check antifreeze protection level	☐ **Y**	☐ **N**	☐ **N/A**
39I	Check diesel exhaust system hangers and supports	☐ **Y**	☐ **N**	☐ **N/A**
40I	Tighten control and power wiring connection	☐ **Y**	☐ **N**	☐ **N/A**

41I	Diesel engine water level is full	☐ **Y**	☐ **N**	☐ **N/A**
42I	Water jacket heater appears to be working properly	☐ **Y**	☐ **N**	☐ **N/A**
43I	Water jacket piping is drip tight	☐ **Y**	☐ **N**	☐ **N/A**
44I	Diesel engine water hose is good condition	☐ **Y**	☐ **N**	☐ **N/A**
45I	Coolant antifreeze protection is adequate	☐ **Y**	☐ **N**	☐ **N/A**
46I	Cooling line strainer is clean	☐ **Y**	☐ **N**	☐ **N/A**
47I	Solenoid valve is operating correctly	☐ **Y**	☐ **N**	☐ **N/A**
48I	Bearing and valves are lubricated	☐ **Y**	☐ **N**	☐ **N/A**
System Components				
49I	Casing relief valves is free of damage	☐ **Y**	☐ **N**	☐ **N/A**
50I	Pressure relief valve is free of damage	☐ **Y**	☐ **N**	☐ **N/A**
51I	All valves, fittings, and pipes are leak tight	☐ **Y**	☐ **N**	☐ **N/A**
52I	Condensate drain trap is clean	☐ **Y**	☐ **N**	☐ **N/A**
53I	Fire pump controller power is on	☐ **Y**	☐ **N**	☐ **N/A**
54I	Transfer switch normal pilot light is on	☐ **Y**	☐ **N**	☐ **N/A**
55I	Jockey pump is operational	☐ **Y**	☐ **N**	☐ **N/A**
56I	Jockey pump controller is set on.	☐ **Y**	☐ **N**	☐ **N/A**
57I	jockey pump controller is set on "auto"	☐ **Y**	☐ **N**	☐ **N/A**
58I	Fire pump shaft coupling appears properly aligned	☐ **Y**	☐ **N**	☐ **N/A**
59I	Packing glands appear properly adjusted	☐ **Y**	☐ **N**	☐ **N/A**
60I	Test header control valve is closed	☐ **Y**	☐ **N**	☐ **N/A**
61I	Test header is in good condition	☐ **Y**	☐ **N**	☐ **N/A**
62I	Test header valves and caps are in good condition	☐ **Y**	☐ **N**	☐ **N/A**
63I	Test header valves handles are in good condition	☐ **Y**	☐ **N**	☐ **N/A**
64I	Test header valve swivel rotation is nonbonding	☐ **Y**	☐ **N**	☐ **N/A**
65I	Bypass control valves are open	☐ **Y**	☐ **N**	☐ **N/A**
66I	Control valves are sealed / not tampered	☐ **Y**	☐ **N**	☐ **N/A**

67I	Control valves are properly tagged and identified	☐ **Y**	☐ **N**	☐ **N/A**
68I	Flow meter control valves are closed	☐ **Y**	☐ **N**	☐ **N/A**
69I	Relief valve and cone are operational	☐ **Y**	☐ **N**	☐ **N/A**
70I	Relief valves pressure appears properly adjusted.	☐ **Y**	☐ **N**	☐ **N/A**
General Maintenance				
1M	Lubricate pump bearings.	☐ **Y**	☐ **N**	☐ **N/A**
2M	Lubricate coupling.	☐ **Y**	☐ **N**	☐ **N/A**
3M	Lubricate right-angle gear drive.	☐ **Y**	☐ **N**	☐ **N/A**
4M	Grease motor bearings.	☐ **Y**	☐ **N**	☐ **N/A**
5M	Replace flexible hoses and connectors.	☐ **Y**	☐ **N**	☐ **N/A**
6M	Replace oil at 50 hours or annually.	☐ **Y**	☐ **N**	☐ **N/A**
7M	Calibrate pressure switch settings.	☐ **Y**	☐ **N**	☐ **N/A**
8M	Check accuracy of pressure sensor.	☐ **Y**	☐ **N**	☐ **N/A**
9M	Clean pump room louvers.	☐ **Y**	☐ **N**	☐ **N/A**
10M	Remove water and foreign materials from diesel fuel tank.	☐ **Y**	☐ **N**	☐ **N/A**
11M	Rod out the heat exchanger or cooling system.	☐ **Y**	☐ **N**	☐ **N/A**
12M	Fire pump controller in service.	☐ **Y**	☐ **N**	☐ **N/A**
13M	Fire alarm panel “normal”.	☐ **Y**	☐ **N**	☐ **N/A**

SN	**SIGNICANT COMMENTS**
APPROVAL	☐ **APPROVED** ☐ **REJECTED**

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

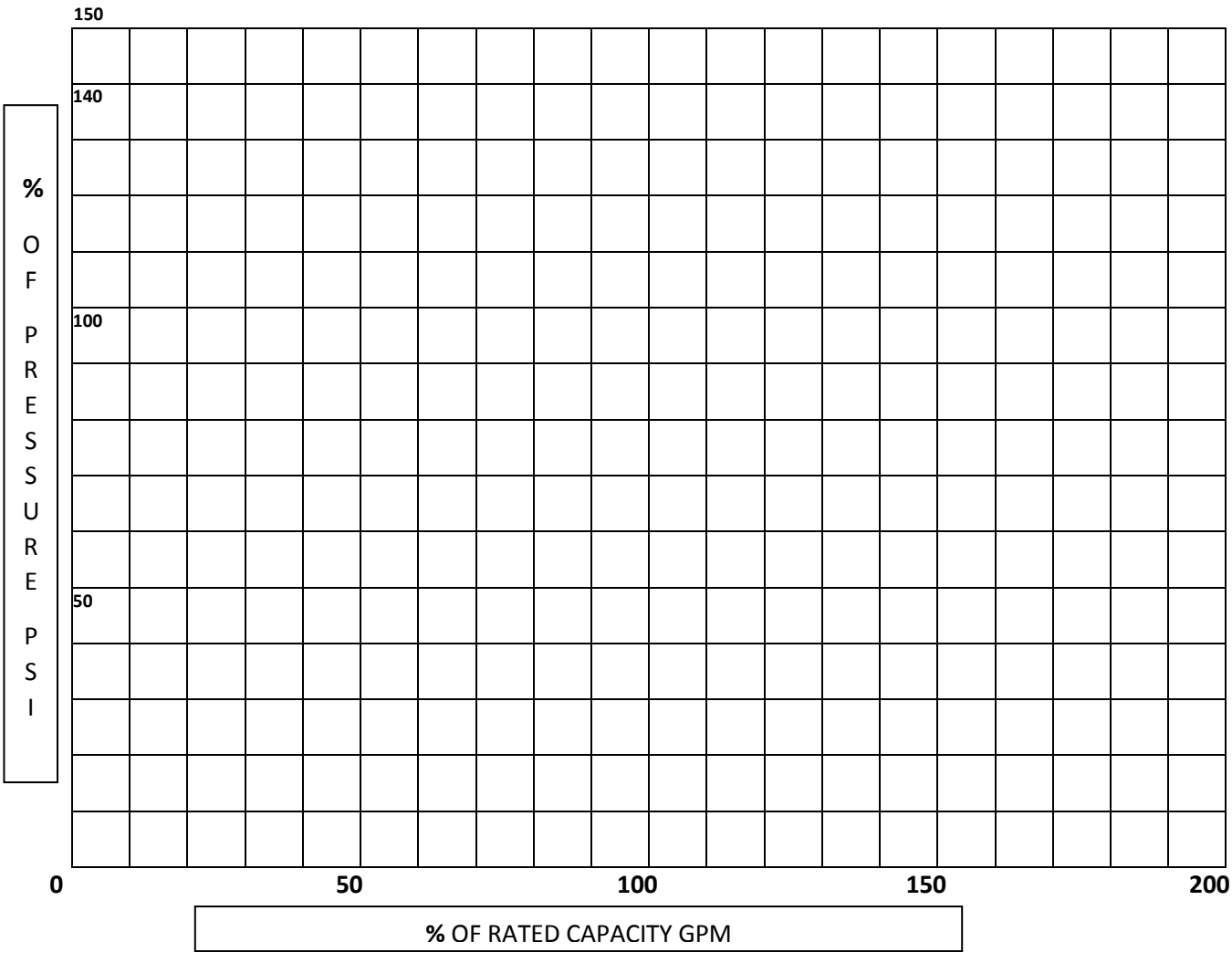
MINISTRY OF INTERIOR
QATAR CIVIL DEFENSE
FIRE PREVENTION DEPARTMENT

Form SS-ITM-M/E-O-01

FIRE PUMP
PERFORMANCE TEST (ANNUALLY)

Building Name : **Location :** **Year :**

FIRE PUMP	Manufacturer	Model	Type ☐ Centrifugal ☐ Turbine	Shaft ☐ Horizontal ☐ Vertical
	Rated Capacity GPM	Rated Speed RPM	Rated Pressure psi(bar)	Water Supply
DRIVER	Manufacturer	Model	Rated HP	Rated Speed (RPM)
	Power ☐ Electric ☐ Diesel	Rated Voltage Volts	Rated Frequency Hz	Phase
CONTROLLER	Manufacturer	Model	Type	Shaft



SN	TESTING	REMARKS
1T	Automatic starts performed 10 times	☐ Y ☐ N ☐ N/A
2T	Automatic start functions properly.	☐ Y ☐ N ☐ N/A
3T	Automatic stop functions properly.	☐ Y ☐ N ☐ N/A
4T	Automatic start: psi (bar)	☐ Y ☐ N ☐ N/A
6T	Automatic stop: psi (bar)	☐ Y ☐ N ☐ N/A
7T	Manual starts performed 10 times.	☐ Y ☐ N ☐ N/A
8T	Manual start functions properly.	☐ Y ☐ N ☐ N/A
9T	Manual stop functions properly.	☐ Y ☐ N ☐ N/A
10T	Manual start: psi (bar)	☐ Y ☐ N ☐ N/A
11T	Manual stop: psi (bar)	☐ Y ☐ N ☐ N/A
12T	Remote start functions properly.	☐ Y ☐ N ☐ N/A
13T	Remote stop functions properly.	☐ Y ☐ N ☐ N/A
14T	Remote start: psi (bar)	☐ Y ☐ N ☐ N/A
15T	Remote stop: psi (bar)	☐ Y ☐ N ☐ N/A
16T	Timer indicates total run time: min.	☐ Y ☐ N ☐ N/A
17T	Timer reset and graph paper changed?	☐ Y ☐ N ☐ N/A
18T	Test data and flow charts completed. (Attach all water flow charts, electrical power charts, performance curves, etc.)	☐ Y ☐ N ☐ N/A
18T	Fire pump electrical power readings recorded at each flow condition?	☐ Y ☐ N ☐ N/A
19T	Fire pump motor speed: rpm	☐ Y ☐ N ☐ N/A
20T	Fire pump discharge flow: gpm (L/min)	☐ Y ☐ N ☐ N/A
21T	Jockey pump operational.	☐ Y ☐ N ☐ N/A
22T	Jockey pump appears properly aligned.	☐ Y ☐ N ☐ N/A
23T	Jockey pump valves open.	☐ Y ☐ N ☐ N/A
24T	Jockey pump “turn-on”: psi (bar)	☐ Y ☐ N ☐ N/A
25T	Jockey pump “turn-off”: psi (bar)	☐ Y ☐ N ☐ N/A

SN	SIGNICANT COMMENTS
APPROVAL	☐ **APPROVED** ☐ **REJECTED**

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

2.4
III. WATER SUPPLY SYSTEMS

WATER SUPPLY SYSTEMS

Legend

Semi-Annual | Annually | MR

Remarks

Y - Satisfactory N – Unsatisfactory N/A – Not Applicable

Notes

1. Fill up color shaded cells with “Y”, “N”, or “N/A”.
2. Additional notes can be added at the last page of this guide.
3. Methods / Frequencies WITHOUT COLOR are referred to Manufacturer’s Recommendation / Technical Specialists.
4. Methods of Inspection, Testing and Maintenance shall be based on NFPA 22, NFPA 24, NFPA 25, NFPA 1142 and NFPA Fire Protection System – Inspection, Testing and Maintenance Manual and/or Manufacturer’s recommendation.

Code	Item	Frequency (Y, N, N/A)			
		CONTRACTOR			
		Semi-annually	Annually		
III.i	**INSPECTION**				
III.i1	Check if tank condition is normal.				
III.i2	Control valves are properly arranged.				
III.i3	Check pressure tank air pressure and record pressure in psi (bar).				
III.i4	Water level is at normal height.				
III.i5	Check air pressure for tanks without their air pressure supervised.				
III.i6	Tank exterior condition is satisfactory.				
III.i7	Tank support structure is satisfactory.				
III.i8	Tank catwalks and ladders are satisfactory. (if applicable)				
III.i9	Area around tank is free from debris and there is no sign of leakage				
III.i10	Inspect water level for tanks with supervised water level alarms connected to constantly attended location.				
III.i11	Inspect air pressure for tanks having their air pressure source supervised.				

III.i12	The fire department Siamese connection is accessible.				
III.i13	The fire department Siamese connection is adequately supported.				
III.i14	Fire department connection hose threads are in good condition.				
III.i15	Automatic ball drip on fire department connection is operational.				
III.i16	General condition of water storage tanks is satisfactory, with no loose or leaky seams or rivets.				
III.i17	Ladders on water storage tanks are stable and free from rust.				
III.i18	The roofs on water storage tanks are stable and free of rust.				
III.i19	Sway bracing on elevated water storage tanks is stable and free of rust.				
III.i20	The condition of the paint of the water storage tanks is satisfactory.				
III.i21	Elevated water storage tank columns and pits are free of dirt, rubbish and trash.				
III.i22	In rubberized fabric tanks, the drain outlets has no leaks.				
III.i23	In rubberized fabric tanks, the fabric is not worn.				
III.i24	In rubberized fabric tanks, the fabric outer protective paint has no oxidation or weather checking.				
III.i25	The paint on pressure tanks is satisfactory.				
III.i26	Expansion joints show no signs of stress, rust or corrosion.				
III.i27	Pressure tank shows no sign of rust, corrosion or collection of debris. (every 3 years)				
III.i28	Inspect interior of steel tanks without corrosion protection. (every 3 years)				
III.i29	Tank interior shows no sign of rust, corrosion or collection of debris. (every 5 years)				
III.i30	Examine all valves to make sure they remain operational. (every 5 years)				
III.t	**TESTING**				
III.t1	Temperature alarms operate properly (if applicable)				
III.t2	Water level alarms operate properly.				
III.t3	Drain sediment from tank and examine for				

	signs of tank deterioration.		
III.t4	Conduct flow test		
III.t5	Test cathodic protection of storage tanks for proper operation		
III.t6	Test automatic tank fill valves by lowering the water level in the tank. Measure and record fill rate.		
III.m	**MAINTENANCE**		
III.m1	Refer to manufacturer's instruction for complete maintenance procedure. (Note: May include all necessary daily or weekly activities to complete ITM procedures. Also, may include preventive and corrective maintenance as per recommendation of manufacturer or specialists.)		
III.t12	Cycle storage tank drain valves		
III.t13	Clean storage tank vent screen		
III.t14	Operate control valves to ensure it can fully open or close		

Code	Notes / Comments / Resolution: [Key in the code at the beginning of each note (I, II, III, IV, V, or VI).]
☐ **APPROVED** ☐ **REJECTED**	

I _____ , hereby declare that the information filled-up on this form is true and correct and that all system and equipment is operational except as noted in the comments section of this guide.

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

WATER SUPPLY SYSTEM
INSPECTION AND TEST FORM - 1 (SEMI ANNUALLY)

Building Name:
Location:
Year:

Remarks

Y - Satisfactory N – Unsatisfactory N/A – Not Applicable

Notes

1. Fill up cells with “Y”, “N”, or “N/A”.
2. Additional comments can be added at the last page of this guide.
3. Methods of Inspection, Testing and Maintenance shall be based on NFPA 22, NFPA 24, NFPA 25, NFPA 1142 and NFPA Fire Protection System – Inspection, Testing and Maintenance Manual and/or Manufacturer’s recommendation.

SN	INSPECTION	SA1	SA2
1I	Check if tank condition is normal.		
2I	Control valves are properly arranged.		
3I	Check pressure tank air pressure and record pressure in psi (bar).		
4I	Water level is at normal height.		
5I	Check air pressure for tanks without their air pressure supervised.		
SN	**TESTING**		
1T	Temperature alarms operate properly (if applicable)		
2T	Water level alarms operate properly.		

SN	SIGNICANT COMMENTS
☐ APPROVED ☐ REJECTED	

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

WATER SUPPLY SYSTEM
INSPECTION FORM - 2 (SEMI ANNUALLY)

Building Name:
Location:
Year:

Remarks
Y - Satisfactory N – Unsatisfactory N/A – Not Applicable

Notes
1. Fill up cells with “Y”, “N”, or “N/A”.
2. Additional comments can be added at the last page of this guide.
3. Methods of Inspection, Testing and Maintenance shall be based on NFPA 22, NFPA 24, NFPA 25, NFPA 1142 and NFPA Fire Protection System – Inspection, Testing and Maintenance Manual and/or Manufacturer’s recommendation.

SN	INSPECTION	SA1	SA2
1I	Tank exterior condition is satisfactory.		
2I	Tank support structure is satisfactory.		
3I	Tank catwalks and ladders are satisfactory. (if applicable)		
4I	Area around tank is free from debris and there is no sign of leakage		
5i	Inspect water level for tanks with supervised water level alarms connected to constantly attended location.		
6I	Inspect air pressure for tanks having their air pressure source supervised.		
7I	Water level alarm operates properly.		
8I	Drain sediment from tank and examine for signs of tank deterioration.		

SN	SIGNICANT COMMENTS
☐ APPROVED ☐ REJECTED	

(Signature above Printed Name) / Date
ITM Contractor

(Signature above Printed Name) / Date
Facility Manager

WATER SUPPLY SYSTEM

INSPECTION TESTING AND MAINTENANCE FORM - 3 (ANNUALLY)

Location:

Year:

Remarks

Y - Satisfactory N – Unsatisfactory N/A – Not Applicable

Notes

1. Fill up cells with “Y”, “N”, or “N/A”.
2. Additional comments can be added at the last page of this guide.
3. Methods of Inspection, Testing and Maintenance shall be based on NFPA 22, NFPA 24, NFPA 25, NFPA 1142 and NFPA Fire Protection System – Inspection, Testing and Maintenance Manual and/or Manufacturer’s recommendation.

SN	INSPECTION	
1I	The fire department Siamese connection is accessible	
2I	The fire department Siamese connection is adequately supported.	
3I	Fire department Siamese connection caps are provided.	
4I	Fire department connection hose threads are in good condition.	
5i	Automatic ball grip on fire department connection is operational.	
6I	General condition of water storage tanks is satisfactory.	
7I	Ladder on water storage tanks are stable and free from rust.	
8I	The condition of the paint on the water storage tanks is satisfactory.	
9I	Elevated water storage tank columns and pits are free of dirt, rubbish and trash.	
10I	In rubberized fabric tanks, the drain outlet has no leaks.	
11I	In rubberized fabric tanks, the fabric is not worn.	
12I	In rubberized fabric tanks, the fabric outer protective paint has no oxidation or weather checking.	
13I	The paint on pressure tanks is satisfactory.	
14I	The interior of pressure tanks has been inspected by a qualified pressure-vessel inspector.	
15I	The heating system is operating properly. (if applicable)	
16I	Expansion joints show no signs of stress, rust or corrosion.	

	TESTING	
	Conduct Flow Test.	
	Test automatic tank fill valves by lowering the water level in the tank. Measure and record refill rate.	
	Test cathodic protection of storage tanks for proper operation.	
	MAINTENANCE	
	Cycle storage tank drain valves.	
	Clean storage tank vent screens.	
	Operate control valves to ensure they can fully open and close.	
	Clean and paint the exposed surfaces of embankment-supported coated fabric (ESCF) suction tanks every 2 years.	

SN	SIGNICANT COMMENTS
☐ **APPROVED** ☐ **REJECTED**	

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

WATER SUPPLY SYSTEM
INSPECTION FORM - 4 (EVERY 3 AND 5 YEARS)

Location:
Year:

Remarks

Y - Satisfactory N – Unsatisfactory N/A – Not Applicable

Notes

1. Fill up cells with “Y”, “N”, or “N/A”.
2. Additional comments can be added at the last page of this guide.
3. Methods of Inspection, Testing and Maintenance shall be based on NFPA 22, NFPA 24, NFPA 25, NFPA 1142 and NFPA Fire Protection System – Inspection, Testing and Maintenance Manual and/or Manufacturer’s recommendation.

SN	INSPECTION	
1I	Pressure tank shows no sign of rust, corrosion or collection of debris. (every 3 years)	
2I	Inspect interior of steel tanks without corrosion protection. (every 3 years)	
3I	Tank interior shows no signs of rust, corrosion or collection of debris. (every 5 years)	
4I	Examine all valves to make sure they remain operational. (every 5 years)	

SN	SIGNICANT COMMENTS
☐ APPROVED	☐ REJECTED

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

FLOW TEST
TEST FORM - 5 (ANNUALLY)

Location:
Year:

Conduct 2 in. (51 mm) main drain test for gravity tanks and pressure tanks.
Static pressure: _____ psi (bar)
Full flow pressure: _____ psi (bar)
Ground level tank and underground tanks: Annual test is accomplished during fire pump flow tests.

Water Distribution System

Annual test is accomplished during fire hydrant annual tests. For each test, record the following:
Residual hydrant location: _____
Flow hydrant location: _____
Static pressure (residual hydrant): _____ psi (bar)
Residual pressure (residual hydrant): _____ psi (bar)
Pitot pressure (flow hydrant): _____ psi (bar)
Nozzle size (flow hydrant): _____ in. (mm)
Nozzle coefficient (flow hydrant): 0.9; other _____
Available water flow: _____ gpm (L/min) at _____ psi (bar)

SIGNICANT COMMENTS
☐ **APPROVED** ☐ **REJECTED**

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

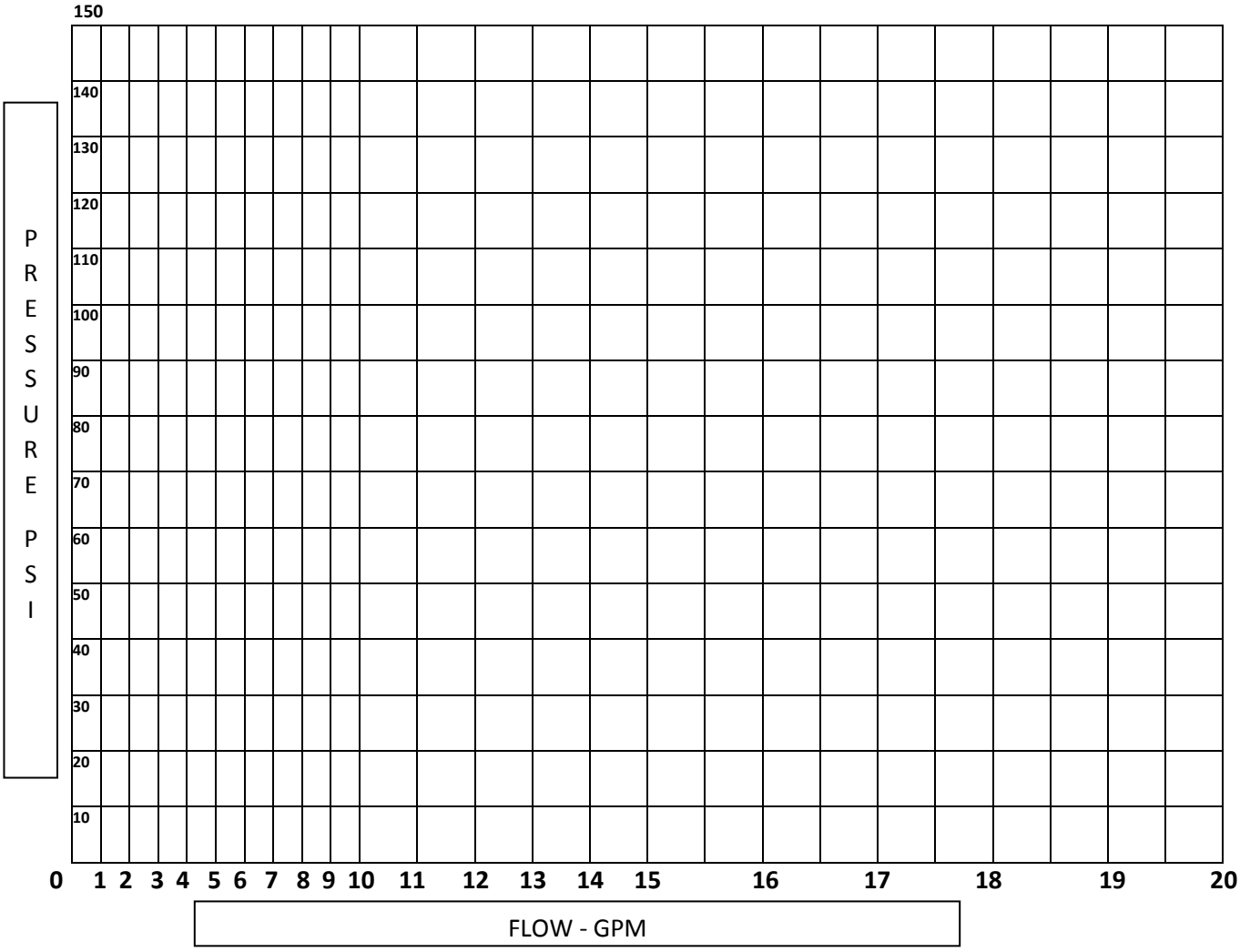
Facility Manager

MINISTRY OF INTERIOR
QATAR CIVIL DEFENSE
FIRE PREVENTION DEPARTMENT

Form SS-ITM-M/E-O-01

FLOW AND PRESSURE RECORD
TEST FORM - 5 (ANNUALLY)

Building Name : **Location :** **Year :**



SIGNICANT COMMENTS
☐ APPROVED ☐ REJECTED

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

IV. STANDPIPE AND HOSE SYSTEMS

STANDPIPE AND HOSE SYSTEMS

Legend

Semi-Annual | Annually | MR

Remarks

Y - Satisfactory N – Unsatisfactory N/A – Not Applicable

Notes

1. Fill up color shaded cells with “Y”, “N”, or “N/A”.
2. Additional notes can be added at the last page of this guide.
3. Methods / Frequencies WITHOUT COLOR are referred to Manufacturer’s Recommendation / Technical Specialists.
4. Methods of Inspection, Testing and Maintenance shall be based on NFPA 1, NFPA 14, NFPA 1961, NFPA 25 and NFPA Fire Protection System – Inspection, Testing and Maintenance Manual and/or Manufacturer’s recommendation.

Code	Item	Frequency (Y, N, N/A)	
		CONTRACTOR	
		Semi-annually	Annually
IV.i	**INSPECTION**		
IV.i1	Inspect control valves		
IV.i2	Inspect pressure regulating devices.		
IV.i3	Inspect all hose valves provided with pressure regulating.		
IV.i4	Inspect piping for physical damage, corrosion, or tempering.		
IV.i5	Inspect piping of standpipe systems.		
IV.t	**TESTING**		
IV.t1	Test water flow alarm devices.		
IV.t2	Test valve (supervisory) switches.		
IV.t3	Test hose nozzles		
IV.t4	Test operation of control valves.		

IV.t5	Test fire pump if they are used as part of water supply system.				
IV.t6	Conduct main drain test from hydraulically most remote standpipe outlet.				
IV.t7	Hydrostatic test dry standpipes. (5 years)				
IV.t8	Conduct flow test from hydraulically most remote standpipe. (5 years)				
IV.t9	Perform pressure regulating valve flow test. (5 years)				
IV.m	**MAINTENANCE**				
IV.m1	Lubricate the swing-out hose racks and / or hose reels so they operate easily.				
IV.m2	Lubricate OS & Y valves. Apply lubricant to valve stem. Close and reopen to distribute lubricant.				
IV.m3	Refer to the manufacturer's instructions for complete maintenance procedures. (Note: May include all necessary daily or weekly activities to complete ITM procedures. Also, may include preventive and corrective maintenance as per recommendation of manufacturer or specialists.)				

Code	Notes / Comments / Resolution: [Key in the code at the beginning of each note (I, II, III, IV, V, or VI).]

☐ **APPROVED** ☐ **REJECTED**

I _____ , hereby declare that the information filled-up on this form is true and correct and that all system and equipment is operational except as noted in the comments section of this guide.

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

STANDPIPE AND HOSE SYSTEMS
GENERAL INFORMATION FORM - 1

Building Name: _____ **Date:** _____
Location: _____

General

Systems Designation: _____
Location of Control Valve: _____
Type of System ☐Class 1 ☐ Class 2 ☐ Class 3
Length of hose provided ☐ None ☐ 50 ft (15m) ☐ 75 ft (23m) ☐ 100 ft (30m)
Type of hose? ☐ Rubber lined ☐ Unlined
Are shutoff nozzles provided? ☐YES ☐NO
Has the sprinkler system been modified since last inspection? ☐ YES ☐ NO

Valves

How are valves supervised? ☐Sealed ☐Locked ☐Tampered Switch
Are valves identified with signs? ☐YES ☐NO

Pumps

Is fire pump? ☐ Diesel ☐ Electric ☐ Gasoline ☐Others _____
When was the fire pump last inspected? _____
Is the fire pump in good condition? ☐YES ☐NO

Water Supply

When was the last water supply test made? _____
Are reservoirs, tanks or pressure tanks in good conditions? ☐YES ☐NO

Fire Department Connections

Location? _____
Are identification signs provided? ☐YES ☐NO

Wet System

Is system hydraulically calculated? ☐YES ☐NO

Dry System

Remarks: _____

Deluge Systems

Remarks: _____

Pre-action System

Remarks: _____

SN	SIGNICANT COMMENTS
	☐ **APPROVED** ☐ **REJECTED**

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

MINISTRY OF INTERIOR
QATAR CIVIL DEFENSE
FIRE PREVENTION DEPARTMENT

Form SS-ITM-M/E-O-01

STANDPIPE HYDROSTATIC AND FLOW TEST FORM - 2 (EVERY 5 YEARS)

Building Name: _____ Date: _____
Location: _____

DESCRIPTION	REMARKS
Standpipe System _____	
Initial Test Pressure Record the hydrostatic pressure at the start of the test. Test pressure should be 200psi (13.8bar) or 50psi (3.4bar) above normal pressure if normal pressure exceeds 150 psi. (10.3bar).	
Start Time Record the time at the start of the test after the test pressure is reached.	
End Time Record the time at the conclusion of the hydrostatic test. The test should hold the pressure for at least 2 hours.	
End Test Pressure Record the hydrostatic pressure at the conclusion of the test.	
Flow Test Flow water from the hydraulically most remote pipe outlet. Static Pressure: _____ psi (bar) Residual Pressure: _____ psi (bar) Nozzle diameter: _____ in. (cm) Pitot pressure: _____ psi (bar) Flow: _____ gpm. (L/min)	

SN	SIGNICANT COMMENTS
	☐ **APPROVED** ☐ **REJECTED**

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

MINISTRY OF INTERIOR
QATAR CIVIL DEFENSE
FIRE PREVENTION DEPARTMENT

Form SS-ITM-M/E-O-01

DRY STANDPIPE CONTROL VALVES
INSPECTION FORM - 3 (SEMI ANNUALLY)

Building Name: _____ Date: _____
Location: _____

1. Date of inspection.
2. Inspector's name, initials or badge number.
3. If valves are sealed, note "YES" in this block. If any are not sealed. Reseal and note "RESEALED" in this block.
4. Record any comments about the system that the inspector believes to be significant.

DATE 1	INSPECTOR 2	VALVES SEALED 3	COMMENTS 4
☐ APPROVED	☐ REJECTED		

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

MINISTRY OF INTERIOR
QATAR CIVIL DEFENSE
FIRE PREVENTION DEPARTMENT

Form SS-ITM-M/E-O-01

CONTROL VALVES HAVING NORMAL WATER SUPPLY - FOAM SYSTEMS INSPECTION FORM - 4 (SEMI ANNUALLY)

Building Name: _____ Date: _____
Location: _____

1. Date of inspection.
2. Inspector's name, initials or badge number.
3. Identify valve location or other identification.
4. If valve is open and visually appears in good condition, note "OK" ok the block.
5. Record any comments about the system that the inspector believes to be significant.

DATE 1	INSPECTOR 2	VALVES 3	OPEN & OK 4	COMMENTS 5

SN	SIGNICANT COMMENTS
	☐ APPROVED ☐ REJECTED

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

MINISTRY OF INTERIOR
QATAR CIVIL DEFENSE
FIRE PREVENTION DEPARTMENT

Form SS-ITM-M/E-O-01

STANDPIPE AND HOSE SYSTEMS
INSPECTION FORM - 5 (SEMI ANNUALLY)

Building Name: _____ Date: _____
Location: _____

1. Inspector's name, initials or badge number.
2. Visually inspect hose for damage. Is it properly racked or is nozzle attached? If Hose is in good condition, note "OK" in block. If not, see that corrections are made and briefly described actions taken.
3. Sign should be posted at each station. If signs are posted, note "OK" in block. If not, see that signs are provided and briefly describe actions taken.
4. If fire department connections are unobstructed and in good condition, note "OK" in block. If not, see that corrections are made and briefly describe actions taken.
5. If signs are provided at the fire department connections, note "OK" in the block. If not, see that signs are provided and briefly describe actions taken.
6. Note "OK" in the block if all valves are open, supervised, and in good condition. If not, see that corrections are made and briefly describe actions taken.
7. If Water Supplies have been inspected, note OK in the block. If not, see that proper inspections are made.
8. Record any comments about the system that the inspector believes to be significant.

INSPECTOR	HOSE CABINETS / RACKS	SIGNS POSTED	FIRE DEPT. CONNECTION	SIGNS	VALVES OPEN	WATER SUPPLY	COMMENTS

SN	SIGNIFICANT COMMENTS
☐ APPROVED ☐ REJECTED	

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

STANDPIPE AND HOSE SYSTEMS
TESTING FORM – 6 (SEMI ANNUALLY)

Building Name: _____ Date: _____
Location: _____

SN	DESCRIPTION	SA1	SA2
1T	Identify and test flow switch		
2T	Record any comments about the system that the inspector believes to be significant. Place a number in the block and number the corresponding comment. Below.		

SN	SIGNIFICANT COMMENTS
☐ **APPROVED**	☐ **REJECTED**

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

MINISTRY OF INTERIOR
QATAR CIVIL DEFENSE
FIRE PREVENTION DEPARTMENT

Form SS-ITM-M/E-O-01

STANDPIPE AND HOSE SYSTEMS
TESTING FORM – 7 (SEMI-ANNUAL)

Building Name : _____ Date: _____
Location : _____

DESCRIPTION	SA1	SA2
Identify and test flow switch		
Record any comments about the system that the inspector believes to be significant. Place a number in the block and number the corresponding comment. Below.		
Identify and test flow switch		
Record any comments about the system that the inspector believes to be significant. Place a number in the block and number the corresponding comment. Below.		

SIGNICANT COMMENTS
☐ **APPROVED** ☐ **REJECTED**

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

MINISTRY OF INTERIOR
QATAR CIVIL DEFENSE
FIRE PREVENTION DEPARTMENT

Form SS-ITM-M/E-O-01

STANDPIPE AND HOSE SYSTEMS
TESTING FORM – 8 (ANNUALLY)

Building Name: _____ Date: _____
Location: _____

DESCRIPTION	
Visually Inspect Dry Piping Visually inspect all accessible piping for damage and corrosion. If piping is in good condition, note "OK" in the block. If not, see corrections are made and briefly describe actions taken.	
Hose Outlet Remove hose outlet location.	
Check Nozzles (Test Hose Nozzle to confirm:)	
Waterway is clear of obstructions	
No damage to tip	
Full operation of adjustments	
Proper operation of shutoff	
No missing parts	
Thread gasket is in good condition	
If nozzles are in good condition, note "OK" in the block. If not, see corrections are made and briefly describe actions taken.	
Lubricate Swing-out Racks Lubricate swing out racks with graphite to ensure they operate properly. Record "OK" in the block if no problems are found.	
Re-rack hose *(if applicable)* Remove and re-rack hose so that different parts of hose are located at bends. Check gaskets for deterioration and replace if necessary.	
Conduct Main Drain Test (see Automatic Sprinkler System)	

SIGNICANT COMMENTS
☐ **APPROVED** ☐ **REJECTED**

(Signature above Printed Name) / Date
ITM Contractor

(Signature above Printed Name) / Date
Facility Manager

V. FIRE HYDRANTS

FIRE HYDRANTS

Legend

Semi-Annual | Annually | MR

Remarks

Y - Satisfactory N – Unsatisfactory N/A – Not Applicable

Notes

1. Fill up color shaded cells with “Y”, “N”, or “N/A”.
2. Additional notes can be added at the last page of this guide.
3. Methods / Frequencies WITHOUT COLOR are referred to Manufacturer’s Recommendation / Technical Specialists.
4. Methods of Inspection, Testing and Maintenance shall be based on NFPA 24 and NFPA Fire Protection System – Inspection, Testing and Maintenance Manual and/or Manufacturer’s recommendation.

Code	Item	Frequency (Y, N, N/A)	
		CONTRACTOR	
		Semi-annually	Annually
V.i	**Inspection**		
	All hydrants		
V.i1	Check hose houses if provided.		
V.i2	Check hydrant accessibility.		
	Wet barrel hydrants		
V.i4	Check accessibility		
V.i5	Check tightness of outlets		
V.i6	Open valve and check for leaks on top		
V.i7	Check for leaks in gasket under caps when hydrant is open		
V.i8	Check for cracks in hydrant valve.		
V.i9	Inspect operating nut for wear or rounded corners		

V.i10	Inspect outlet for damage.				
	Dry barrel hydrants				
V.i11	Hydrant outlets are slightly more than hand-tight.				
V.i12	There are no leaks in hydrant.				
V.i13	There are no cracks in the hydrant barrel.				
V.i14	Operating nut is not worn and does not have rounded corners.				
V.i15	Nozzle thread are not damaged.				
V.t	**Testing**				
V.t1	Flow test for 1 minute.				
V.t2	Shut down dry barrel hydrant and check for drainage.				
V.t3	Check hydrant outlets and caps.				
V.m	**Maintenance**				
V.m1	Lubricate the opening nut, packing, and thrust collar.				
V.m2	Maintain hose houses if applicable.				

Code	Notes / Comments / Resolution: [Key in the code at the beginning of each note (I, II, III, IV, V, or VI).]

☐ **APPROVED** ☐ **REJECTED**

I _____ , hereby declare that the information filled-up on this form is true and correct and that all system and equipment is operational except as noted in the comments section of this guide.

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

MINISTRY OF INTERIOR
QATAR CIVIL DEFENSE
FIRE PREVENTION DEPARTMENT

Form SS-ITM-M/E-O-01

FIRE HYDRANTS

INSPECTION FORM (SEMI ANNUALLY)

This form covers a 6-year period

Year _____ System _____

Location _____

Y = Satisfactory **N** = Unsatisfactory (explain below) **N/A** = Not Applicable

Date (month)	**SA1**	**SA2**	**SA1**	**SA2**	**SA1**	**SA2**	**SA1**	**SA2**	**SA1**	**SA2**	**SA1**	**SA2**
Inspector												
Check hose houses to make sure they are not damaged and equipment is in good condition.												
House #												
House #												
House #												
House #												
House #												

Comments
☐ **APPROVED** ☐ **REJECTED**

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

MINISTRY OF INTERIOR
QATAR CIVIL DEFENSE
FIRE PREVENTION DEPARTMENT

Form SS-ITM-M/E-O-01

FIRE HYDRANTS

Dry Barrel hydrants Inspection (SEMI ANNUAL)

This form covers a 1-year period.

Year _____ System _____

Location _____

Y = Satisfactory **N** = Unsatisfactory (explain below) **N/A** = Not Applicable

Date (every 6 months)	**SA1**	**SA2**
Inspector		
Hydrant outlets are slightly more than hand tight.		
There are no leaks in the hydrant.		
There are no cracks in the hydrant barrel.		
Operating nut is not worn and does not have rounded corners.		
Nozzle threads are not damaged.		

Comments
☐ **APPROVED** ☐ **REJECTED**

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

MINISTRY OF INTERIOR
QATAR CIVIL DEFENSE
FIRE PREVENTION DEPARTMENT

Form SS-ITM-M/E-O-01

FIRE HYDRANTS

Wet Barrel Hydrants Inspection (ANNUALLY)

This form covers a 1-year period.

Year _____ System _____

Location _____

Y = Satisfactory **N** = Unsatisfactory (explain below) **N/A** = Not Applicable

Date (yearly)	
Inspector	
Hydrants are accessible.	
Hydrant outlets are slightly more than hand-tight.	
There are no leaks in the hydrant.	
There are no leaks in the gasket under caps when valve is open.	
There are no cracks in the hydrant barrel.	
Operating nut is not worn and does not have rounded corners.	
Nozzle threads are not damaged.	
Check hose houses, if provided, to ensure all equipment is in good condition.	

Comments
☐ **APPROVED** ☐ **REJECTED**

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

MINISTRY OF INTERIOR
QATAR CIVIL DEFENSE
FIRE PREVENTION DEPARTMENT

Form SS-ITM-M/E-O-01

FIRE HYDRANTS

Test and Maintenance (ANNUALLY)

This form covers a 1-year period.

Year _____ System _____

Location _____

Note: For testing, see Water Supply System - Annual Flow Test. Refer to manufacturer's information for details on how to lubricate the particular hydrant.

Y = Satisfactory **N** = Unsatisfactory (explain below) **N/A** = Not Applicable

Date (yearly)	
Inspector	
Lubricate operating nut.	
Lubricate packing.	
Lubricate thrust collar.	

Comments
☐ **APPROVED** ☐ **REJECTED**

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

VI. WATER MIST SYSTEMS

WATER MIST SYSTEMS

Legend

Semi-Annual | Annually | MR

Remarks

Y - Satisfactory N – Unsatisfactory N/A – Not Applicable

Notes

1. Fill up color shaded cells with “Y”, “N”, or “N/A”.
2. Additional notes can be added at the last page of this guide.
3. Methods / Frequencies WITHOUT COLOR are referred to Manufacturer’s Recommendation / Technical Specialists.
4. Methods of Inspection, Testing and Maintenance shall be based on NFPA 750, NFPA 25, NFPA 3 and NFPA Fire Protection System Inspection, Testing and Maintenance Manual and/or Manufacturer’s recommendation.

Code	Item	Frequency (Y, N, N/A)	
		CONTRACTOR	
		Semi-annually	Annually
VI.i	**Inspection**		
VI.i1	Check water tank level if, unsupervised.		
VI.i2	Check air pressure in air receiver, if unsupervised.		
VI.i3	Inspect control valves		
VI.i4	Check that sight glass valves are open.		
VI.i5	Check water level in circulation tank, if supervised.		
VI.i6	Check compressed gas cylinder pressure, if unsupervised.		
VI.i7	Check that cylinder control valves is open.		
VI.i8	Check compressor pressure (if supervised)		
VI.i9	Check cylinder valves, pneumatic master release valves.		
VI.i10	Inspect water pressure gauges to ensure pressure is within normal range and gauges in good condition.		
VI.i11	Check control valves (if locked or electrically supervised).		

VI.i12	Check compressed gas supply, inlet air pressure.		
VI.i13	Check outlet water pressure.		
VI.i14	Check water supply source pressure.		
VI.i15	Check water level in water storage tank, if supervised.		
VI.i16	Check water tank pressure gauges.		
VI.i17	Check water storage cylinder water level, if unsupervised.		
VI.i18	Check condition of additive storage cylinder.		
VI.i19	Check level in water recirculation tank.		
VI.i20	Check compressed gas cylinder supports and restraints for corrosion.		
VI.i21	Check compressed gas cylinder pressure, if supervised.		
VI.i22	Inspect moisture trap and oil injection of standby pump.		
VI.i23	Check all tubing associated with pneumatic release valves.		
VI.i24	Check water flow devices		
VI.i25	Inspect valve supervisory alarm devices		
VI.i26	Check water storage tank valves.		
VI.i27	Check water level (load cells) of high pressure water storage cylinders, if provided.		
VI.i28	Check quality of additive agent.		
VI.i29	Check air pressure and receiver		
VI.i30	Check enclosure integrity.		
VI.i31	Inspect water mist piping and nozzles		
VI.i32	Inspect water tank condition.		
VI.i33	Inspect high pressure storage cylinder frame and support condition.		
VI.i34	Inspect filters on refill condition.		
VI.i35	Check supports and attachments on water recirculation tank.		
VI.i36	Check compressor / receiver air moisture content.		
VI.i37	Check compressed gas cylinder capacity and pressure.		
VI.i38	Check compressed gas cylinder compliance specification.		
VI.t	**Periodic Testing**		
VI.t1	Start Air compressor, if provided.		
VI.t2	Test start / stop pressure settings		
VI.t3	Test vane-type pressure switch-type water flow devices.		

VI.t4	Check water source quality.							
VI.t5	Test source pressure, flow, and quantity duration.							
VI.t6	Check quality of additive agent.							
VI.t7	Test additive injection and full discharge test.							
VI.t8	Test low level water alarm.							
VI.t9	Test water recirculation tank.							
VI.t10	Test backflow prevention device.							
VI.t11	Test compressor and receiver.							
VI.t12	Test pneumatic valve components.							
VI.t13	Test interlock with ventilation systems.							
VI.t14	Test shutdown of fuel / lubrication systems.							
VI.t15	Hydrostatically test cylinders. (5 or 12yrs)							
VI.m	**Maintenance**							
VI.m1	Clean filters and moisture traps of compressors and receivers.							
VI.m2	Drain, inspect interior, and refill water tank.							
VI.m3	Drain, inspect interior, and flush water recirculation tank.							
VI.m4	Flush system.							
VI.m5	Operate control valves through their full range and return to normal position.							

Code	Notes / Comments / Resolution: [Key in the code at the beginning of each note (I, II, III, IV, V, or VI).]

☐ **APPROVED** ☐ **REJECTED**

I _____ , hereby declare that the information filled-up on this form is true and correct and that all system and equipment is operational except as noted in the comments section of this guide.

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

WATER MIST SYSTEMS

General Information

Year _____ System _____

Location _____

General

System designation _____

Building _____

Location of main control valve _____

Has the system been modified since last inspection? ☐ Yes ☐ No

What is hazard protected? _____

Valves

How are the valves supervised? ☐ Sealed ☐ Locked ☐ Tamper switch

Are valves identified with signs? ☐ Yes ☐ No

Water Supply

Is the water supply filtered? ☐ Yes ☐ No

When were storage tanks, if used, last inspected? _____

Additive

Is additive used? ☐ Yes ☐ No

Type of additive _____

Compressed Gas Cylinders

Number of cylinders _____

Pumps

When was pump last inspected? _____

In pump on good condition? ☐ Yes ☐ No

Detection System (if any)

When was detection system last inspected? _____

Operating instructions

Are operating instructions posted? ☐ Yes ☐ No

SN	SIGNICANT COMMENTS
☐ **APPROVED**	☐ **REJECTED**

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

MINISTRY OF INTERIOR
QATAR CIVIL DEFENSE
FIRE PREVENTION DEPARTMENT

Form SS-ITM-M/E-O-01

WATER MIST SYSTEMS

INSPECTION (SEMI ANNUALLY)

This form covers a 5-year period

Year _____ System _____

Location _____

1. Date of inspection
2. Inspector's name or badge number
3. Check that water tank is full, if water is not supervised.
4. Check air pressure gauge to confirm that adequate air pressure is being maintained.
5. Check air pressure gauge to confirm that adequate air pressure is being maintained by air compressor.
6. Record any comments about the system that the inspector believes to be significant. Continue on reverse if necessary.

Y = Satisfactory **N =** Unsatisfactory (explain below) **N/A =** Not Applicable

Date	Inspector	Water Level	Air Receiver Pressure	Air compressor	Comments
☐ **APPROVED** ☐ **REJECTED**					

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

MINISTRY OF INTERIOR
QATAR CIVIL DEFENSE
FIRE PREVENTION DEPARTMENT

Form SS-ITM-M/E-O-01

WATER MIST SYSTEMS

INSPECTION (SEMI ANNUALLY)

This form covers a 5-year period.

Year _____ System _____

Location _____

1. Record pressure.
2. Record any comments about the system that the inspector believes to be significant. Place a number in the block and number the corresponding comments at the end of this form.

Y = Satisfactory **N =** Unsatisfactory (explain below) **N/A =** Not Applicable

Date	SA1	SA2	SA1	SA2	SA1	SA2	SA1	SA2	SA1	SA2
Inspector (name or badge number).										
Check that sight glass valves are open.										
Check water lever in recirculation tank (if supervised).										
Check compressed gas cylinder pressure (if unsupervised)										
Check that cylinder control valve is open.										
Check air compressor pressure (if supervised)										
Check pneumatic cylinder valves are open.										
Check water pressure gauges.										
Pressure within normal range										
Gauges are in good condition.										
Check control valves are open (if supervised).										

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

MINISTRY OF INTERIOR
QATAR CIVIL DEFENSE
FIRE PREVENTION DEPARTMENT

Form SS-ITM-M/E-O-01

WATER MIST SYSTEMS

INSPECTION (SEMI ANNUALLY)

This form covers a 5-year period.

Year _____ System _____

Location _____

1. Date of inspection
2. Inspector's name or badge number
3. Check water source pressure.
4. Check water tank level (if supervised).
5. Check tank pressure gauges.
6. Check water storage cylinder.
7. Check cylinder pressure (if supervised).
8. Check to ensure that control valves are in proper position, check pneumatic tubing, inspect moisture trap.
9. Record any comments about the system that the inspector believes to be significant. Place a number in this block and number the corresponding comment at the end of this form.

Y = Satisfactory **N =** Unsatisfactory (explain below) **N/A =** Not Applicable

Date	Inspector	Water Source Pressure	Water Tank Level	Tank pressure	Water Storage Cylinder	Cylinder Pressure	Operating Components	Comments

Comments

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

MINISTRY OF INTERIOR
QATAR CIVIL DEFENSE
FIRE PREVENTION DEPARTMENT

Form SS-ITM-M/E-O-01

WATER MIST SYSTEMS

INSPECTION FORM (SEMI ANNUALLY AND ANNUALLY)

This form covers a 1-year period.

Year _____ System _____

Location _____

Y = Satisfactory **N =** Unsatisfactory (explain below) **N/A =** Not Applicable

Semi-Annual Inspection	**SA1**	**SA2**
Date		
Inspector		
Inspect all valves.		
Check storage cylinder water levels.		
Check quantity of additive agent.		
Annual Inspection	**YEAR 1**	
Date		
Inspector		
Inspect tank condition.		
Inspect filters on water storage cylinders.		
Inspect system strainers.		
Inspect control equipment and fiber-optic connections.		
Inspect fittings, hangers, nozzles, and flexible tubing.		

Comments

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

MINISTRY OF INTERIOR
QATAR CIVIL DEFENSE
FIRE PREVENTION DEPARTMENT

Form SS-ITM-M/E-O-01

WATER MIST SYSTEMS

INSPECTION FORM (SEMI ANNUALLY AND ANNUALLY)

This form covers a 1-year period.

Year _____ System _____

Location _____

Y = Satisfactory N = Unsatisfactory (explain below) N/A = Not Applicable

Semi-Annual Inspection	**SA1**	**SA2**
Date		
Inspector		
Clean filters and moisture traps.		
Annual Inspection	**YEAR 1**	
Date		
Inspector		
Check source quality.		
Test water source pressure, flow.		
Drain water tank, inspect interior, refill.		
Test quality of additive agent.		
Test additive injection at full discharge.		
Test water recirculation tank float valve.		
Test water recirculation tank outlet pressure.		
Test backflow prevention device (if any).		
Inspect and clean filters, strainers.		
Confirm compressed gas meets specifications.		
Test compressed air moisture content.		
Test pneumatic system operation (if any).		

Comments

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

VII. FOAM SYSTEMS

FOAM SYSTEMS

Legend

Semi-Annual | Annually | MR

Remarks

Y - Satisfactory N – Unsatisfactory N/A – Not Applicable

Notes

1. Fill up color shaded cells with “Y”, “N”, or “N/A”.
2. Additional notes can be added at the last page of this guide.
3. Methods / Frequencies WITHOUT COLOR are referred to Manufacturer’s Recommendation / Technical Specialists.
4. Methods of Inspection, Testing and Maintenance shall be based on NFPA 11, NFPA 25, NFPA 3, NFPA Fire Protection System Inspection, Testing and Maintenance Manual and/or Manufacturer’s recommendation.

Code	Item	Frequency (Y, N, N/A)	
		CONTRACTOR	
		Semi-annually	Annually
VII.i	**Inspection**		
VII.i1	Inspect control valves.		
VII.i2	Inspect water pressure gauges.		
VII.i3	Inspect the proportioning system.		
VII.i4	Ensure that operating instructions are posted.		
VII.i5	Inspect water flow devices.		
VII.i6	Inspect pressure reducing and relief valves.		
VII.i7	Inspect foam chambers.		
VII.i8	Inspect system piping.		
VII.i9	Inspect hangers, supports and seismic bracing.		
VII.i10	Inspect foam concentrate tanks.		
VII.t	**Testing**		
VII.t1	Test mechanical flow devices (motor gongs).		

VII.t2	Test water flow alarms (if any).				
VII.t3	Conduct complete operation test, automatically or manually.				
VII.t4	Test backflow prevention assemblies (if any)				
VII.t5	Test foam quality.				
VII.t6	Test manual activation devices.				
VII.t7	Flow test underground and exposed piping. (5 years)				
VII.m	**Maintenance**				
VII.m1	Operate the foam concentrate pump (if any).				
VII.m2	Service pressure vacuum vent on foam tank.				
VII.m3	Lubricate all valve stems.				
VII.m4	Operate control valves through its full range.				
VII.m5	High-pressure cylinders used in compressed air foam systems should not be recharged without hydrostatic test if more than 5 years have elapsed since last hydrostatic test date. (every 5 years)				
VII.m6	Cylinder that have been in continuous service without discharge should be hydrostatically tested at 12 years.				

Code	Notes / Comments / Resolution: [Key in the code at the beginning of each note (I, II, III, IV, V, or VI).]

☐ **APPROVED** ☐ **REJECTED**

I _____, hereby declare that the information filled-up on this form is true and correct and that all system and equipment is operational except as noted in the comments section of this guide.

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

MINISTRY OF INTERIOR
QATAR CIVIL DEFENSE
FIRE PREVENTION DEPARTMENT

Form SS-ITM-M/E-O-01

FOAM SYSTEMS

GENERAL INFORMATION FORM - 1

Year _____ System _____

Location _____

General

System designation _____

Building _____

Location of main control valve _____

Has the system been modified since last inspection? ☐ Yes ☐ No

What is hazard protected? _____

Valves

How are the valves supervised? ☐ Sealed ☐ Locked ☐ Tamper switch

Are valves identified with signs? ☐ Yes ☐ No

Water Supply

When was the last water supply test made? _____

Are reservoirs, tanks, or pressure tanks in good condition? ☐ Yes ☐ No

Pumps

Is the fire pump (if applicable) ☐ Diesel ☐ Electric ☐ Gasoline

When was pump last inspected? _____

Is pump in good condition? ☐ Yes ☐ No

Foam

Type of foam concentrate _____

Percentage of foam concentrate _____

Comments

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

FOAM SYSTEMS

INSPECTION FORM - 2 (SEMI ANNUALLY)

This form covers a 5-YEAR period.

Year _____ System _____

Location _____

1. Date of inspection
2. Inspector's name or badge number
3. If valves are sealed, note "yes" in this block. If any are not sealed, reseal and note "resealed" in this block.
4. Record any comments about the system that the inspector believes to be significant.

Y = Satisfactory **N =** Unsatisfactory (explain below) **N/A =** Not Applicable

Date	Inspector	Valves Sealed	Comments

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

FOAM SYSTEMS

INSPECTION FORM -3(SEMI ANNUALLY)

This form covers a 5-year period.

Year _____ System _____

Location _____

1. Date of inspection
2. Inspector
3. If valves are locked, place “L” in space. If valves have tamper switch, place “TS” in space.
4. Record water pressure.
5. Ensure that valves are in correct position, concentrate tank is full, and general condition looks good.
6. For foam-water sprinkler/spray systems, ensure that exterior of deluge valve is free of damage, trim valves are in appropriate position, valve is not leaking, and electrical components appear in working order.
7. For low-, medium-, or high-expansion foam systems, inspect outlets for damage, blocking, or other impairments.
8. Record any notes about the system that the inspector believes to be significant. Place a number in this column and number the corresponding note at the end of the inspection form.

Y = Satisfactory **N =** Unsatisfactory (explain below) **N/A =** Not Applicable

Date	Inspector	Control Valve(s)	Water Pressure Gauges	Proportioning System	Deluge Valve	Foam Discharge Outlets	Comments

Comments

(Signature above Printed Name) / Date

Maintenance Contractor

(Signature above Printed Name) / Date

Owner’s Representative

MINISTRY OF INTERIOR
QATAR CIVIL DEFENSE
FIRE PREVENTION DEPARTMENT

Form SS-ITM-M/E-O-01

FOAM SYSTEMS

INSPECTION FORM - 4 (SEMI ANNUALLY)

This form covers a 5-year period.

Year _____ System _____

Location _____

Y = Satisfactory **N =** Unsatisfactory (explain below) **N/A =** Not Applicable

Date										
Inspector										
Foam Concentrate Strainers Blow-Down										
Valve closed and plugged										
Water Flow Devices Free of Damage										
Valves open										
Valves not leaking										
Downstream pressure maintained per design (record)										
Valves in good condition with hand-wheels installed										

Comments

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

MINISTRY OF INTERIOR
QATAR CIVIL DEFENSE
FIRE PREVENTION DEPARTMENT

Form SS-ITM-M/E-O-01

FOAM SYSTEMS

INSPECTION FORM – 5 (SEMI ANNUALLY)

This form covers a 5-year period.

Year _____ System _____

Location _____

Y = Satisfactory **N =** Unsatisfactory (explain below) **N/A =** Not Applicable

Date	**SA1**	**SA2**	**SA1**	**SA2**	**SA1**	**SA2**	**SA1**	**SA2**	**SA1**	**SA2**
Inspector										
Inspect foam chambers for obstruction and confirm vapor seal is intact.										
Inspect piping fittings.										
No mechanical damage										
No Excessive rust or corrosion										
Piping not misaligned										
Low point drains provided										
Rubber-gasketed fittings appear in good condition										
Inspect hangers, supports, and seismic bracing										
No damaged or missing hangers										
Hangers secure										
No excessive rust or corrosion										
Inspect foam concentrate tanks for corrosion and damage.										
Inspect foam concentrate for signs of sludging.										

Comments

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

FOAM SYSTEMS

INSPECTION FORM - 6 (SEMI ANNUALLY)

This form covers a 1-year period.

Year _____ System _____

Location _____

Y = Satisfactory **N =** Unsatisfactory (explain below) **N/A =** Not Applicable

Semi-Annual		
Test mechanical water flow devices (if any) (e.g. water motor gongs).		
Test foam-water sprinkler/spray systems if sole water supply is through backflow preventer or pressure reducing valve.		
Static pressure		
Residual pressure		
Static pressure returned		
Time for static pressure to return		
Test water flow alarms		
Annually		
Test detection system (if any).		
Conduct complete operational test.		
Ensure discharge devices are properly oriented.		
Ensure discharge devices are not obstructed.		
Test backflow prevention devices (if any).		
Test foam quality in accordance with manufacturer's recommendations.		
Test the pump (if any).		

Comments

(Signature above Printed Name) / Date

Maintenance Contractor

(Signature above Printed Name) / Date

Owner's Representative

FOAM SYSTEMS

MAINTENANCE FORM - 7 (SEMI ANNUALLY)

This form covers a 6-month period.

Year _____ System _____

Location _____

Y = Satisfactory **N =** Unsatisfactory (explain below) **N/A =** Not Applicable

SEMI ANNUALLY	SA1	SA2
Operate pump for 20-30 seconds. Assure no foam is lost.		
Record any comments that the inspector believes to be significant. Place a number in the block and number the corresponding comment below.		
Service pressure-vacuum vent on foam concentrate tank.		
Record any comments that the inspector believes to be significant. Place a number in the block and number the corresponding comment below.		

Comments

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

FOAM SYSTEMS

MAINENANCE FORM - 8 (ANNUALLY)

This form covers a 1-year period.

Year _____ System _____

Location _____

Y = Satisfactory **N =** Unsatisfactory (explain below) **N/A =** Not Applicable

Date	
Inspector	
Lubricate valve and operate through its full range and return to normal position.	
Maintain fire pump (if any).	
Maintain water tank (if any).	
Record any comments that the inspector believes to be significant. Place a number in the block and number the corresponding comment below.	

Comments

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

VIII. Fixed Wet Chemical Extinguishing Systems

FIXED WET CHEMICAL EXTINGUISHING SYSTEMS

Legend

Semi-Annual | Annually | MR

Remarks

Y - Satisfactory N – Unsatisfactory N/A – Not Applicable

Notes

1. Fill up color shaded cells with “Y”, “N”, or “N/A”.
2. Additional notes can be added at the last page of this guide.
3. Methods / Frequencies WITHOUT COLOR are referred to Manufacturer’s Recommendation / Technical Specialists.
4. Methods of Inspection, Testing and Maintenance shall be based on NFPA 17A, NFPA 96, NFPA 1, NFPA 3, NFPA Fire Protection System Inspection, Testing and Maintenance Manual and/or Manufacturer’s Recommendation.

Code	Item	Frequency (Y, N, N/A)			
		CONTRACTOR			
		Semi-annually	Annually		
VIII.i	**Inspection**				
VIII.i1	Check for physical damage to system components.				
VIII.i2	Check nozzle caps.				
VIII.i3	Check to see if new cooking equipment has been added or existing equipment is relocated.				
VIII.i4	Check for nozzles orientation.				
VIII.i5	Check to make sure manual actuators are unobstructed and operating instructions are posted.				
VIII.i6	Check tamper indicators and seals.				
VIII.i7	Check maintenance tag or certificate.				
VIII.i8	Check pressure gauges.				
VIII.i9	Check that the hazard has not changed or been modified.				

VIII.i10	Check that the system has not been modified.					
VIII.t	**Testing**					
VIII.t1	Perform actual test without discharging agent.					
VIII.t2	Disconnect agent and perform actuating test (manual or fusible link).					
VIII.m	**Maintenance**					
VIII.m1	Refer to the manufacturer's instruction for complete maintenance procedures.					
VIII.m2	Check to see that the hazard has not changed. (no addition or relocation of appliance).					
VIII.m3	Examine all piping, nozzles, hose assemblies, releasing devices agent containers, signals and auxiliary equipment.					
VIII.m4	Examine liquid levels in non-pressurized containers.					
VII.m5	Verify system piping for obstruction.					
VII.m6	Test operation of all system.					
VII.m7	Conduct hydrostatic test. (every 12 years)					

Code	Notes / Comments / Resolution: [Key in the code at the beginning of each note (I, II, III, IV, V, or VI).]

☐ **APPROVED** ☐ **REJECTED**

I _____ , hereby declare that the information filled-up on this form is true and correct and that all system and equipment is operational except as noted in the comments section of this guide.

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

MINISTRY OF INTERIOR
QATAR CIVIL DEFENSE
FIRE PREVENTION DEPARTMENT

Form SS-ITM-M/E-O-01

FIXED WET CHEMICAL EXTINGUISHING SYSTEMS
GENERAL INFORMATION - 1

Date _____ Inspector _____ System _____
Location _____

General
System designation _____
System manufacturer _____
Date installed _____
Service contractor _____

Type of extinguishing agent
☐ Potassium carbonate
☐ Potassium acetate
☐ Combination potassium carbonate/potassium acetate

Wet chemical cylinder
Normal pressure: _____ psi (bar)
Manufacturer's minimum pressure: _____ psi (bar)
Normal weight: _____ lbs (kg)
Manufacturer's minimum weight: _____ lbs (kg)

Equipment protected
☐ Deep fat fryer(s)
☐ Grill(s)
☐ Charbroiler(s)
☐ Upright broiler(s)
☐ Griddle(s)
☐ Range top(s)
☐ Other _____ _____

Expellant gas cartridge – any provided? ☐ Yes ☐ No
If yes, normal weight (if carbon dioxide): _____ lbs (kg)
Connected to fire alarm system? ☐ Yes ☐ No
Automatic shutdown of cooking equipment? ☐ Yes ☐ No

Comments

(Signature above Printed Name) / Date
ITM Contractor

(Signature above Printed Name) / Date
Facility Manager

FIXED WET CHEMICAL EXTINGUISHING SYSTEMS
INSPECTION - 2 (SEMI ANNUALLY)

This form covers a 5-year period.

Year _____ System _____

Location _____

Y = Satisfactory **N =** Unsatisfactory (explain below) **N/A =** Not Applicable

Date										
Inspector										
Nozzle caps are in place.										
System components have no obvious physical damage.										
Extinguishing system components are in their proper locations.										
No cooking equipment has been added or existing equipment moved.										
Nozzles aim at cooking surfaces they protected.										
Tamper indicators and seals are intact.										
Maintenance tag or certificate is in place.										
Pressure gauges are in operable range.										

MINISTRY OF INTERIOR
QATAR CIVIL DEFENSE
FIRE PREVENTION DEPARTMENT

Form SS-ITM-M/E-O-01

FIXED WET CHEMICAL EXTINGUISHING SYSTEMS
MAINTENANCE – 4 (SEMI ANNUAL)

This form covers a 1-year period.

Year _____ System _____

Location _____

Y = Satisfactory **N =** Unsatisfactory (explain below) **N/A =** Not Applicable

Note: Pressure and weights are satisfactory if they are equal to or greater than the minimum in the General Information.

Date		
Inspector		
Wet chemical cylinder pressure: _____ psi (bar) (if applicable)		
Expellant gas cartridge (if applicable)		
Pressure of nitrogen: _____ psi (bar), or		
Weight of carbon dioxide: _____ lb (kg)		
Components are undamaged		
Detectors or fusible links.		
Expellant gas cylinder(s).		
Wet chemical containers.		
Releasing devices.		
Piping		
Nozzles		
Alarms		
Auxilliary equipment		
Damage components replaced or hydrostatically tested.		
System piping was tested for obstructions.		
Fusible link replaced (annually).		

SN	SIGNICANT COMMENTS
☐ APPROVED	☐ REJECTED

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

MINISTRY OF INTERIOR
QATAR CIVIL DEFENSE
FIRE PREVENTION DEPARTMENT

Form SS-ITM-M/E-O-01

FIXED WET CHEMICAL EXTINGUISHING SYSTEMS

TEST FORM - 5 (SEMI ANNUAL)

Date _____ Inspector _____ System _____

Location _____

Date of last hydrostatic test _____

(Test are required every 12 years.)

Date of actuating test (required semi-anually)

Manual release	☐ Satisfactory	☐ Unsatisfactory
Fusible link	☐ Satisfactory	☐ Unsatisfactory
Connection to fire alarm system	☐ Yes	☐ No
Result	☐ Satisfactory	☐ Unsatisfactory
Connection to shut off power to cooking equipment	☐ Yes	☐ No
Results	☐ Satisfactory	☐ Unsatisfactory
Connection to shut down supply air to exhaust hood		
Results	☐ Satisfactory	☐ Unsatisfactory
Grease exhaust fan	☐ Continues to run	☐ Stops
Connection to shut off electric power to receptacles under hood		
Results	☐ Satisfactory	☐ Unsatisfactory

Hydrostatic test performed every 12 years on:

Wet chemical containers	☐ Yes	☐ No
Auxilliary pressure containers	☐ Yes	☐ No
Hose assemblies	☐ Yes	☐ No

SN	SIGNICANT COMMENTS
☐ APPROVED ☐ REJECTED	

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

IX. CLEAN AGENT FIRE EXTINGUISHING SYSTEM

CLEAN AGENT FIRE EXTINGUISHER SYSTEM

Legend

Semi-Annual | Annually | MR

Remarks

Y - Satisfactory N – Unsatisfactory N/A – Not Applicable

Notes

1. Fill up color shaded cells with “Y”, “N”, or “N/A”.
2. Additional notes can be added at the last page of this guide.
3. Methods / Frequencies WITHOUT COLOR are referred to Manufacturer’s Recommendation / Technical Specialists.
4. Methods of Inspection, Testing and Maintenance shall be based on NFPA 2001, NFPA3, NFPA Fire Protection System – Inspection, Testing and Maintenance Manual and/or Manufacturer’s recommendation.

V: Clean Agent Fire Extinguishing System

Code	Item	Frequency (Y, N, N/A)			
		CONTRACTOR			
		Semi-annually	Annually		
IX.i	**Inspection**				
IX.i1	Verify that nozzle caps are in place.				
IX.i2	Check the system for physical damage.				
IX.i3	Check to make sure that the space being protected has not been altered.				
IX.i4	Check all doors in the protected room.				
IX.i5	Check the clean agent containers for damage.				
IX.i6	Check agent quantity of factory-charged, non-refillable containers.				
	Halocarbons				
IX.i7	Check the container pressure gauges.				
IX.i8	Check agent quantity.				

IX.i9	Verify the attached tag.					
	Inert Gas Agent (Not Liquefied)					
IX.i10	Check agent pressure.					
IX.i11	Verify the attached tag					
IX.i12	Inspect the protected enclosure.					
IX.i13	Conduct a thorough inspection of the system.					
IX.t	**Testing**					
IX.t1	Conduct actuating test of the system.					
IX.t2	Conduct hydrostatic test of system hoses. (every 5 years)					
IX.m	**Maintenance**					
IX.m1	Refer to the manufacturer's instruction for complete maintenance procedures.					

Code	Notes / Comments / Resolution: [Key in the code at the beginning of each note (I, II, III, IV, V, or VI).]
☐ **APPROVED** ☐ **REJECTED**	

I _____ , hereby declare that the information filled-up on this form is true and correct and that all system and equipment is operational except as noted in the comments section of this guide.

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

CLEAN AGENT FIRE EXTINGUISHER SYSTEM
GENERAL INFORMATION - 1

Building Name: _____ **Date:** _____
Location: _____

General

Clean Agent System Manufacturer: _____
Detector Manufacturer: _____
Control Panel Manufacturer: _____
Date system installed: _____
Location of Original Design Drawings: _____

Room or area designation: _____
Description of hazard being protected: _____
Type of extinguishing agent: _____
Volume protected: _____ ☐ Above Ceiling ☐ Below raised floor ☐ Between floor & ceiling
System Design Concentration: _____
Weight of Clean Agent with Cylinder: _____
Weight of Cylinder: _____
Weight of Clean Agent: _____
Normal Pressure (super pressure): _____

Detection System : ☐ Ionization type ☐ Photoelectric-type ☐ Rate of Rise
☐ Fixed Temperature ☐ Rate-compensation ☐ Others: _____

Type of Detection System for Halon system operation: ☐ Single zone ☐ Two zones
☐ Two detectors on any ☐ Others: _____

Description of Sequence of Operation *(including short or maintenance switches, delays, timers and power shutdowns)*
Comments:

(Signature above Printed Name) / Date
ITM Contractor

(Signature above Printed Name) / Date
Facility Manager

CLEAN AGENT FIRE EXTINGUISHER SYSTEM
INSPECTION FORM - 1(SEMI ANNUALLY)

Building Name:
Location:
Year:

Remarks

Y - Satisfactory N – Unsatisfactory N/A – Not Applicable

Notes

1. Fill up cells with “Y”, “N”, or “N/A”.
2. Additional comments can be added at the last page of this guide.
3. Methods of Inspection, Testing and Maintenance shall be based on NFPA 2001, NFPA3, NFPA Fire Protection System – Inspection, Testing and Maintenance Manual and/or Manufacturer’s recommendation.

SN	INSPECTION	SA1	SA2
1I	Verify that nozzle caps are in place.		
2I	Check the system for physical damage		
3I	Check to make sure that space being protected has not been altered.		
4I	Check to make sure all doors in the protected room are self-closing or capable of releasing automatically upon operation.		

SN	SIGNICANT COMMENTS
☐ APPROVED ☐ REJECTED	

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

X. FIXED AEROSOL SYSTEM

FIXED AEROSOL SYSTEM

Legend

Semi-Annual | Annually | MR

Remarks

Y - Satisfactory N – Unsatisfactory N/A – Not Applicable

Notes

1. Fill up color shaded cells with “Y”, “N”, or “N/A”.
2. Additional notes can be added at the last page of this guide.
3. Methods / Frequencies WITHOUT COLOR are referred to Manufacturer’s Recommendation / Technical Specialists.
4. Methods of Inspection and Testing shall be based on NFPA 2010 and/or Manufacturer’s recommendation.

VII: Fixed Aerosol System

Code	Item	Frequency (Y, N, N/A)	
		CONTRACTOR	
		Semi-annually	Annually
X.i	**Inspection**		
X.i1	Check system operating condition.		
X.i2	Check protected enclosure.		
X.i3	Check system proper operation.		
X.t	**Testing**		
X.t1	Test the system according to manufacturer’s test procedure.		
X.m	**Maintenance**		
X.m1	Refer to the manufacturer’s instruction for complete maintenance procedures.		
X.m2	All openings in the protected space shall be permanently sealed to prevent the loss of agent.		

Code	Notes / Comments / Resolution: [Key in the code at the beginning of each note (I, II, III, IV, V, or VI).]
☐ APPROVED	☐ REJECTED

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(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

FIXED AEROSOL SYSTEM
INSPECTION FORM (SEMI ANNUALLY)

Building Name:
Location:
Year:

Remarks

Y - Satisfactory N – Unsatisfactory N/A – Not Applicable

Notes

1. Fill up cells with “Y”, “N”, or “N/A”.
2. Additional comments can be added at the last page of this guide.
3. Methods of Inspection and Testing shall be based on NFPA 2010 and/or Manufacturer’s recommendation.

SN	INSPECTION	SA1	SA2
1I	Check system operating condition.		
2I	Check protected enclosure.		
3I	Check system proper operation.		

SN	SIGNICANT COMMENTS
☐ APPROVED ☐ REJECTED	

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

XI. PORTABLE FIRE EXTINGUISHERS

PORTABLE FIRE EXTINGUISHER

Legend

Semi-Annual | Annually | MR

Remarks

Y - Satisfactory N – Unsatisfactory N/A – Not Applicable

Notes

1. Fill up color shaded cells with “Y”, “N”, or “N/A”.
2. Additional notes can be added at the last page of this guide.
3. Methods / Frequencies WITHOUT COLOR are referred to Manufacturer’s Recommendation / Technical Specialists.
4. Methods of Inspection, Testing and Commissioning shall be based on NFPA 10, NFPA Fire Protection System – Inspection, Testing and Maintenance Manual and/or Manufacturer’s recommendation.

Code	Item	Frequency (Y, N, N/A)	
		CONTRACTOR	
		Semi-annually	Annually
XI.i	**INSPECTION**		
XI.i1	Confirm that the fire extinguisher is its proper place.		
XI.i2	Confirm that access to and visibility of the fire extinguisher are not obstructed.		
XI.i3	Confirm that the extinguisher operating instructions are legible and face outward.		
XI.i4	Confirm that the pressure gauge (if applicable) is in normal range.		
XI.i5	Note any obvious physical damage.		
XI.m	**MAINTENANCE**		
XI.m1	Replace / Recondition fire extinguisher that has been found with deficiency.		
XI.m2	Refer to the manufacturer’s instructions for complete maintenance procedures. (Note: May include all necessary daily or weekly		

	activities to complete ITM procedures. Also, may include preventive and corrective maintenance as per recommendation of manufacturer or specialists.)		

Code	Notes / Comments / Resolution: [Key in the code at the beginning of each note (I, II, III, IV, V, or VI).]
☐ **APPROVED**	☐ **REJECTED**

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(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

MINISTRY OF INTERIOR
QATAR CIVIL DEFENSE
FIRE PREVENTION DEPARTMENT

Form SS-ITM-M/E-O-01

PORTABLE FIRE EXTINGUISHER
INSPECTION AND MAINTENANCE FORM (SEMI ANNUALLY)

Visually inspect the fire extinguishers to verify that it is in its proper location, that it is not blocked, is fully charged, and that it appears to be in good operating condition and free of physical damage. Use the inspection form to record all inspection results.

Extinguisher Location / Building / Floor / Area	Type	Serial No.	ID No.	Date Purchased	Use (M) for monthly inspection Use (A) for annual maintenance check Use (R) for extinguisher recondition				**Comments**
					SA1	SA2	SA1	SA2	
Comments:									
☐ **APPROVED** ☐ **REJECTED**									

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

2.13

XII. FIRE DETECTION AND ALARM SYSTEM

FIRE DETECTION AND ALARM SYSTEM

Legend

Semi-Annual | Annually | MR

Remarks

Y - Satisfactory N – Unsatisfactory N/A – Not Applicable

Notes

1. Fill up color shaded cells with “Y”, “N”, or “N/A”.
2. Additional notes can be added at the last page of this guide.
3. Methods / Frequencies WITHOUT COLOR are referred to Manufacturer’s Recommendation / Technical Specialists.
4. Methods of Inspection, Testing and Maintenance shall be based on Table 14.3.1 and Table 14.4.3.2 of NFPA 72 and/or Manufacturer’s recommendation.

Code	Item	Frequency (Y, N, N/A)	
		CONTRACTOR	
		SEMI ANNUALLY	ANNUALLY
XII.i	**INSPECTION**		
XII.i1	All Equipment		
XII.i2	Control Equipment Fire alarm system monitored for alarm, supervisory and trouble signals		
	- Fuses		
	- Interfaced equipment		
	- Lamps and LEDs		
	- Primary (main) power supply		
	- Trouble signals		
XII.i3	Control Equipment Fire alarm system unmonitored for		

	alarm, supervisory and trouble signals		
	- Fuses		
	- Interfaced equipment		
	- Lamps and LEDs		
	- Primary (main) power supply		
	- Trouble signals		
XII.i4	Supervising station alarm systems — transmitters		
	- Digital Alarm communicator transmitter (DACT)		
	- Digital Alarm radio transmitter (DART)		
	- McCulloh transmitter - Radio alarm transmitter (RAT)		
	- All other types of communicator		
XII.i5	In-building fire emergency voice/alarm communication equipment		
XII.i6	Batteries		
	- Lead acid		
	- Nickel cadmium		
	- Primary (dry cell)		
	- Sealed lead-acid		
XII.i7	Remote Annunciators		
XII.i8	Notification appliance circuit power extenders		
XII.i9	Remote power supplies		
XII.i10	Transient suppressors		
XII.i11	Fiber-optic cable connection		

XIV.i12	Initiating devices		
	- Air sampling		
	- Duct detector		
	- Electromechanical releasing devices		
	- Fire extinguishing systems or suppression system(s) switches		
	- Manual fire alarm boxes		
	- Heat detectors		
	- Radiant energy fire detectors		
	- Video image smoke and fire detectors		
	- Smoke detectors		
	- Projected beam smoke detectors		
	- Supervisory signal devices		
	- Waterflow devices		
XII.i13	Combination systems		
	- Fire extinguisher electronic monitoring device / systems		
	- Carbon monoxide detectors / systems		
XII.i14	Fire alarm control interface and emergency function interface		
XII.i15	Guard's tour equipment		
XII.i16	Notification appliances		
	- Audible appliances		
	- Audible textual notification appliances		

	- Visual appliances		
XIV.i17	Exit marking audible notification appliances		
XII.i18	Area of refuge two-way communication system		
XII.i19	Supervising station alarm systems — receivers		
	- Signal receipt		
	- Receivers		
XII.i20	Public emergency alarm monitoring system transmission		
	- Publicly accessible alarm box		
	- Auxiliary box		
	- Manual operation (Master box)		
	- Auxiliary operation (Master box)		
XII.i21	Mass Notification Systems Monitored for Integrity		
	- Fuses (Control Equipment)		
	- Interfaces (Control Equipment)		
	- Lamps/LED (Control Equipment)		
	- Primary (main) power supply (Control Equipment)		
	- Secondary power supplies		
	- Initiation devices		
	- Notification appliances		
XII.i22	Mass Notification Systems Not Monitored for Integrity		
	- Fuses (Control Equipment)		

	- Interfaces (Control Equipment)		
	- Lamps/LED (Control Equipment)		
	- Primary (main) power supply (Control Equipment)		
	- Secondary power batteries		
	- Initiation devices		
	- Notification appliances		
	- Antenna		
	- Transceivers		
XII.t	**TESTING**		
XII.t1	All equipment		
XII.t2	Control equipment and transponder		
	- Functions		
	- Fuses		
	- Interfaced equipment		
	- Lamps and LEDs		
	- Primary (main) power supply		
XII.t3	Fire alarm control unit trouble signals		
	- Audible and visual		
	- Disconnect switches		
	- Ground fault monitoring circuit		
	- Transmission of signals to off premises location		
XII.t4	Supervising station alarm systems — transmission Equipment		
	- All equipment		
	- Digital alarm communicator		

	transmitter (DACT)		
	- Digital alarm radio transmitter (DART)		
	- McCulloh transmitter		
	- Radio alarm transmitter (RAT)		
	- Performance based technologies		
XII.t5	Emergency communications equipment		
	- Amplifier/tone generator		
	- Call in signal silence		
	- Off hook indicator (ring down)		
	- Phone jacks		
	- Phone set		
	- System performance		
XII.t6	Engine-driven generator		
XII.t7	Secondary (standby) power supply		
XII.t8	Uninterruptable Power Supply (UPS)		
XII.t9	Battery test Lead acid type		
	- Battery replacement		
	- Charger test		
	- Discharge test		
	- Load voltage test		
	- Specific gravity test		
XII.t10	Battery test Nickel cadium type		
	- Battery replacement		

	- Charger test		
	- Discharge test		
	- Load voltage test		
XII.t12	Battery test Sealed lead acid type		
	- Battery replacement		
	- Charger test		
	- Discharge test		
	- Load voltage test		
XII.t13	Public emergency alarm reporting system – wired system		
XII.t14	Remote annunciator		
XII.t15	Conductors metallic		
	- Stray voltage		
	- Ground faults		
	- Short circuits faults		
	- Loop resistance		
	- Circuit integrity		
XII.t16	Conductors - nonmetallic		
	- Fiber optic		
	- Circuit integrity		
XII.t17	Initiating devices - Electromechanical releasing device		
	- Nonrestorable type link		
	- Restorable type link		
XII.t18	Initiating devices - Fire extinguishing system(s) or suppression system(s)		

	alarm switch		
XII.t19	Initiating devices - Fire–gas and other detectors		
XII.t20	Initiating devices - Heat detectors		
	- Fixed-temperature, rate-of-rise, rate of compensation, restorable line, spot type (excluding pneumatic tube type		
	- Fixed-temperature, nonrestorable line type		
	- Fixed-temperature, nonrestorable spot type		
	- Nonrestorable (general)		
	- Restorable line type, pneumatic tube only		
	- Single- and multiple-station heat alarms		
	- Manual fire alarm boxes		
	- Radiant energy fire detectors		
XII.t21	Initiating devices – Smoke detectors functional test		
	- In other than one- and two-family dwellings, system detectors		
	- Single- and multiple-station smoke alarms connected to protected premises systems		
	- System smoke detectors used in one- and two-family dwellings		
	- Air sampling		
	- Duct type		
	- Projected beam type		

	- Smoke detector with built-in thermal element		
	- Smoke detectors with control output functions		
XII.t22	Initiating devices – Smoke detectors sensitivity test		
	- In other than one- and two-family dwellings, system detectors		
	- Single- and multiple-station smoke alarms connected to protected premises systems		
	- System smoke detectors used in one- and two-family dwellings		
	- Air sampling		
	- Duct type		
	- Projected beam type		
	- Smoke detector with built-in thermal element		
	- Smoke detectors with control output functions		
XII.t23	Smoke detectors—sensitivity testing		
	- Carbon monoxide detectors/carbon monoxide alarms for the purposes of fire detection		
XII.t24	Initiating devices – supervisory		
	- Control valve switch		
	- High- or low-air pressure switch		
	- Room temperature switch		
	- Water level switch		

	- Water temperature switch		
XII.t25	Mechanical, electrosonic, or pressure-type waterflow device		
XII.t26	Multi-sensor fire detector or multi-criteria fire detector or combination fire detector		
XII.t27	Special hazard equipment		
	- Abort switch (dead man type)		
	- Abort switch (recycle type)		
	- Abort switch (special type)		
	- Cross zone detection circuit		
	- Matrix type circuit		
	- Release solenoid circuit		
	- Squibb release circuit		
	- Verified sequential or counting zone circuit		
	- All above devices or circuits or combination therof		
XII.t28	Combination systems		
	- Fire extinguisher electronic monitoring device/system		
	- Carbon monoxide device/system		
	Interface equipment		
	Guard's tour equipment		
	Alarm notification appliances		
	- Audible		
	- Audible textual notification appliances (speakers and other appliances to convey		

	voice messages)		
	- Visible		
XII.t29	Exit marking audible notification appliance		
XII.t30	Emergency control functions		
XII.t31	Area of refuge two-way communication system		
XII.t32	Special procedures		
	- Alarm verification		
	- Multiplex systems		
XII.t33	Supervising station alarm systems-receiving equipment		
	- All equipment		
	- Digital alarm communicator receiver (DACR)		
	- Digital alarm radio receiver (DARR)		
	- McCulloh systems		
	- Radio alarm supervising station receiver (RASSR) and radio alarm repeater station receiver (RARSR)		
	- Private microwave radio systems		
	- Performance-based technologies		
XII.t34	Public emergency alarm reporting system transmission equipment		
	- Publicly accessible alarm box		
	- Auxiliary box		
	- Master box, Manual operation		

	- Master box, Auxiliary operation		
XII.t35	Low-power radio (wireless systems)		
XII.t36	Mass notification systems		
	- Functions		
	- Fuses		
	- Interface equipment		
	- Lamps and LEDs		
	- Audible textual notification appliances (speakers and other appliances to convey voice messages)		
	- Visible		
	- Control unit functions and no diagnostic failures are indicated		
	- Control unit reset		
	- Control unit security		
	- Audible/visible functional test		
	- Software backup		
	- Secondary power test		
	- Wireless signals		
	- Antenna		
	- Transceivers		
XII.m	**MAINTENANCE**		
XII.m1	Refer to manufacturer's instruction for complete maintenance procedure. (Note: May include all necessary daily or weekly activities to complete ITM procedures. Also, may include		

	preventive and corrective maintenance as per recommendation of manufacturer or specialists.) MAINTENANCE RECORDS : ☐ *(attach if any)*		

Code	Notes / Comments / Resolution: [Key in the code at the beginning of each note (I, II, III, IV, V, or VI).]
☐ **APPROVED**	☐ **REJECTED**

I _____ , hereby declare that the information filled-up on this form is true and correct and that all system and equipment is operational except as noted in the comments section of this guide.

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

FIRE DETECTION AND ALARM SYSTEM
INSPECTION AND TEST FORM (SEMI-ANNUALLY)

Building Name :
Location :
Year :

Remarks
Y - Satisfactory N – Unsatisfactory N/A – Not Applicable

Notes
1. Fill up cells with “Y”, “N”, or “N/A”.
2. Additional comments can be added at the last page of this guide.
3. Methods of Inspection, Testing and Maintenance shall be based on Table 14.3.1 and Table 14.4.3.2 of NFPA 72 and/or Manufacturer’s recommendation.

SN	INSPECTION	SA1	SA2
1I	Control equipment – Fire alarm systems monitored for alarm, supervisory, and trouble signals Trouble signals (Method: Verify a system normal condition.) refer to NFPA 72 Table 14.3.1		
2I	Control Equipment Fire alarm system unmonitored for alarm, supervisory and trouble signals		
	- Fuses		
	- Interfaced equipment		
	- Lamps and LEDs		
	- Primary (main) power supply		
	- Trouble signals		
3I	In-building fire emergency voice / alarm communications equipment (Method: Verify location and condition.) refer to NFPA 72 Table 14.3.1		
4I	Batteries		
	- Batteries - Lead Acid (Method: Inspect for corrosion or leakage. Verify tightness of connections. Verify marking of the month/ year of manufacture (all types).) refer to NFPA 72 Table 14.3.1		

	- Batteries - Nickel-cadmium (Method: Inspect for corrosion or leakage. Verify tightness of connections. Verify marking of the month/ year of manufacture (all types).) refer to NFPA 72 Table 14.3.1		
	- Batteries - Primary (dry-cell) (Method: Inspect for corrosion or leakage. Verify tightness of connections. Verify marking of the month/ year of manufacture (all types).) refer to NFPA 72 Table 14.3.1		
	- Batteries - Sealed lead-acid (Method: Inspect for corrosion or leakage. Verify tightness of connections. Verify marking of the month/ year of manufacture (all types).) refer to NFPA 72 Table 14.3.1		
5I	Remote annunciators (Method: Verify location and condition) refer to NFPA 72 Table 14.3.1		
6I	Transient suppressors (Method: Verify location and condition) refer to NFPA 72 Table 14.3.1		
7I	Initiating devices (Method) refer to NFPA 72 Table 14.3.1		
	- Air sampling (General) (Method: Verify that in-line filters, if any, are clean.) refer to NFPA 72 Table 14.3.1		
	- Duct detector		
	- Electromechanical releasing devices		
	- Fixed firefighting systems switches		
	- Manual fire alarm boxes		
	- Heat detector		
	- Radiant energy fire detectors		
	- Video image smoke and fire detectors		
	- Smoke detector		
	- Projected beam detector		
	- Supervisory signal devices		
	- Waterflow devices		
8I	Combination system		
	- Fire extinguisher electronic monitoring device/systems		
	- Carbon monoxide detectors/systems		

9I	Fire alarm control interface and emergency control function interface		
10I	Guard's tour equipment		
11I	Notification appliances		
	- Audible appliances		
	- Audible textual notification appliances		
	- Visible appliances		
12I	Exit marking audible notification appliances		
13I	Supervising station alarm systems —receivers		
	- Signal receipt		
14I	Public emergency alarm reporting system transmission equipment		
	- Publicly accessible alarm box		
	- Master box, manual operation		
15I	Mass notification system Not Monitored for Integrity		
	- Fuses (Control Equipment)		
	- Interface (Control Equipment)		
	- Lamps / LED (Control Equipment)		
	- Primary (main) power supply (Control Equipment)		
	- Secondary power batteries (Control Equipment)		
	- Initiation devices		
	- Notification appliances		
SN	**TESTING**		
1T	Engine-driven generator		
2T	Battery test - Lead acid battery		
	- Load voltage test		
	- Specific gravity		
3T	Battery test - Nickel cadium battery		

	- Load voltage test		
4T	Battery test - Sealed lead acid battery		
	- Load voltage test		
5T	Public emergency alarm reporting system – wired system		
6T	Initiating devices		
	- Radiant Energy detector		
7T	Mechanical, electrosonic, or pressure-type waterflow device		
8T	Supervising station alarm systems-receiving equipment		
	- All equipment		
	- Digital alarm communicator receiver (DACR)		
	- Digital alarm radio receiver (DARR)		
	- McCulloh systems		
	- Radio alarm supervising station receiver (RASSR) and radio alarm repeater station receiver (RARSR)		
	- Private microwave radio systems		
	- Performance-based technologies		
8T	Public emergency alarm reporting system transmission equipment		
	- Publicly accessible alarm box		
	- Master box (1) Manual operation		
MAINTENANCE RECORDS : ☐ *reference document : __attach if any)_____*			

SN	**SIGNIFICANT COMMENTS (related to any deficiency / impairment)**

☐ **APPROVED** ☐ **REJECTED**

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

FIRE DETECTION AND ALARM SYSTEM
INSPECTION AND TEST FORM (ANNUALLY)

Building Name :
Location :
Year :

Remarks
Y - Satisfactory N – Unsatisfactory N/A – Not Applicable

Notes
1. Fill up cells with “Y”, “N”, or “N/A”.
2. Additional comments can be added at the last page of this guide.
3. Methods of Inspection, Testing and Maintenance shall be based on Table 14.3.1 and Table 14.4.3.2 of NFPA 72 and/or Manufacturer’s recommendation.

SN	INSPECTION	Remarks
1I	All equipment	
2I	Control equipment Fire alarm systems monitored for alarm, supervisory, and trouble signals	
	- Fuses	
	- Interface equipment	
	- Lamps and LEDs	
	- Primary (main) power supply	
3I	Supervising station alarm systems — transmitters	
	- Digital alarm communicator transmitter (DACT)	
	- Digital alarm radio transmitter (DART)	
	- McCulloh	
	- Radio alarm transmitter (RAT)	
	- All other types of communicators	
4I	Notification appliance circuit power extenders	
5I	Remote power supplies	
6I	Fiber-optic cable connections	
7I	Area of refuge two-way communication system	

8I	Supervising station alarm systems — receivers	
9I	Public emergency alarm reporting system transmission equipment - Auxiliary box	
	- Master box, Auxiliary operation	
10I	Mass notification system, Monitored for integrity	
	- Fuses (Control equipment)	
	- Interfaces (Control equipment)	
	- Lamps/LED (Control equipment)	
	- Primary (main) power supply (Control equipment)	
	- Secondary power supply (Control equipment)	
	- Initiating devices	
	- Notification appliance	
11I	Mass notification system, Monitored for integrity - Secondary power batteries	
	- Antenna	
	- Transceivers	
TESTING		
1T	All Equipment	
2T	Control equipment and transponder	
	- Functions	
	- Fuses	
	- Interface equipment	
	- Lamps and LEDs	
	- Primary (main) power supply	
3T	Fire alarm control unit trouble signals	
	- Audible and visual	
	- Disconnect switches	
	- Ground-fault monitoring circuit	

	- Transmission of signals to off-premises location	
4T	Supervising station alarm systems — transmission Equipment	
	- All equipment	
	- Digital alarm communicator transmitter (DACT)	
	- Digital alarm radio transmitter (DART)	
	- McCulloh transmitter	
	- Radio alarm transmitter (RAT)	
	- Performance-based technologies	
5T	Emergency communications equipment	
	- Amplifier/tone generators	
	- Call-in signal silence	
	- Off-hook indicator (ring down)	
	- Phone jacks	
	- Phone set	
	- System performance	
6T	Engine-driven generator	
7T	Secondary (standby) power supply	
8T	Uninterruptible power supply (UPS)	
9T	Battery tests - Lead-acid type - Battery replacement - Charger test - Discharge test	
10T	Battery tests - Nickel-cadmium type - Battery replacement - Charger test - Discharge test	
11T	Battery tests – Sealed lead-acid type	

	- Battery replacement - Charger test - Discharge test	
12T	Remote annunciators	
13T	Conductors — metallic	
	- Circuit Integrity	
14T	Conductors — nonmetallic	
	- Fiber Optic	
	- Circuit Integrity	
15T	Initiating device - Electromechanical releasing device	
	- Nonrestorable-type link	
	- Restorable-type link	
16T	Initiating device - Fire extinguishing system(s) or suppression system(s) alarm switch	
17T	Initiating device - Fire–gas and other detector	
18T	Initiating devices - Heat detectors	
	- Fixed-temperature, rate-of-rise, rate of compensation, restorable line, spot type (excluding pneumatic tube type)	
	- Fixed-temperature, nonrestorable line type	
	- Fixed-temperature, nonrestorable spot type	
	- Nonrestorable (general)	
	- Restorable line type, pneumatic tube only	
	- Single- and multiple-station heat alarms	
	- Manual fire alarm boxes	
19T	Initiating devices - Smoke detectors - functional test	
	- In other than one- and two-family dwellings, system detectors	
	- Single- and multiple-station smoke alarms connected to protected premises systems	
	- System smoke detectors used in one- and two-family dwellings	

	- Air sampling	
	- Duct type	
	- Projected beam type	
	- Smoke detector with built-in thermal element	
	- Smoke detectors with control output functions	
20T	Initiating devices – Smoke detectors sensitivity test	
	- In other than one- and two-family dwellings, system detectors	
	- Single- and multiple-station smoke alarms connected to protected premises systems	
	- System smoke detectors used in one- and two-family dwellings	
	- Air sampling	
	- Duct type	
	- Projected beam type	
	- Smoke detector with built-in thermal element	
	- Smoke detectors with control output functions	
21T	Smoke detectors, sensitivity testing - Carbon monoxide detectors/carbon monoxide alarms for the purposes of fire detection	
22T	Initiating devices, supervisory	
	- Control valve switch	
	- High- or low-air pressure switch	
	- Room temperature switch	
	- Water level switch	
	- Water temperature switch	
23T	Multi-sensor fire detector or multi-criteria fire detector or combination fire detector	
24T	Special hazard equipment	
	- Abort switch (dead-man type)	
	- Abort switch (recycle type)	
	- Abort switch (special type)	

	- Cross-zone detection circuit	
	- Matrix-type circuit	
	- Release solenoid circuit	
	- Squibb release circuit	
	- Verified, sequential, or counting zone circuit	
	- All above devices or circuits or combinations thereof	
25T	Combination systems	
	- Fire extinguisher electronic monitoring device/system	
	- Carbon monoxide device/system	
26T	Interface equipment	
27T	Guard's tour equipment	
28T	Alarm notification appliances	
	- Audible	
	- Audible textual notification appliances (speakers and other appliances to convey voice messages)	
	- Visible	
29T	Exit marking audible notification appliance	
30T	Emergency control functions	
31T	Area of refuge two-way communication system	
32T	Special procedures	
	- Alarm verification	
	- Multiplex systems	
33T	Public emergency alarm reporting system transmission equipment	
	- Auxiliary box	
	- Master box, Auxiliary operation	
34T	Low-power radio (wireless systems)	
35T	Mass notification systems	

	- Functions	
	- Fuses	
	- Interfaced equipment	
	- Lamps and LEDs	
	- Primary (main) power supply	
	- Audible textual notification appliances (speakers and other appliances to convey voice messages)	
	- Visible	
	- Control unit functions and no diagnostic failures are indicated	
	- Control unit reset	
	- Control unit security	
	- Audible/visible functional test	
	- Software backup	
	- Secondary power test	
	- Wireless signals	
	- Antenna	
	- Transceivers	
MAINTENANCE		
MAINTENANCE RECORDS : ☐ *reference document :* _____ *(attach if any)*		

SN	SIGNIFICANT COMMENTS (related to any deficiency / impairment)

☐ **APPROVED**	☐ **REJECTED**

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

2.14

XIII. EMERGENCY LIGHTING & EPSS

EMERGENCY LIGHTING & EPSS

Legend

Semi-Annual | Annually | MR

Remarks

Y - Satisfactory N – Unsatisfactory N/A – Not Applicable

Notes

1. Fill up color shaded cells with “Y”, “N”, or “N/A”.
2. Additional notes can be added at the last page of this guide.
3. Methods / Frequencies WITHOUT COLOR are referred to Manufacturer’s Recommendation / Technical Specialists.
4. Methods of Inspection, Testing and Maintenance shall be based on NFPA 101, NFPA 1, NFPA 110, NFPA 111 and/or Manufacturer’s recommendation.

Code	Item	Frequency (Y, N, N/A)	
		CONTRACTOR	
		SEMI-ANNUALLY	ANNUALLY
XIII.i	**INSPECTION**		
XIII.i1	**Battery Powered Unit**		
XIII.i2	Visual inspection of emergency lighting unit to verify that it appears to be in good operating condition and free from physical damage.		
XIII.i3	**Emergency Generators**		
XIII.i4	Check the fuel tank supply level.		
	Inspect day tank level.		
XIII.i5	Inspect and operate the day tank float switch.		
XIII.i6	Inspect and operate solenoid valve		
XIII.i7	Check for water in Fuel System		

XIII.i8	Check the flexible hose and connectors.				
XIII.i9	Check the oil level in the engine.				
XIII.i10	Check the lube oil heater for operation.				
XIII.i11	Check the level of the cooling system for the engine.				
XIII.i12	Check the cooling water to the heat exchanger for adequacy.				
XIII.i13	Check the adequacy of fresh air through the radiator.				
XIII.i14	Check the water pump.				
XIII.i15	Check the flexible hose connections.				
XIII.i16	Check the jacket water heater.				
XIII.i17	Check the exhaust system for leakage.				
XIII.i18	Check the drain condensate trap.				
XIII.i19	Check the electrolyte levels for the batteries.				
XIII.i20	Check the electrical system				
XIII.i21	Inspect the engine.				
XIII.i22	Check housekeeping in the generator room and fuel supply tanks.				
XIII.i23	Inspect the generator.				
XIII.i23	Inspect and check the fan and alternator belts.				
XIII.i25	Inspect the battery charger and charger rate.				
XIII.i26	Check to see that the battery charge is equalized.				
XIII.i27	Inspect and check the circuit breakers and fuses.				
XIII.i28	Inspect and test the governor oil and linkage.				

XIII.i29	Inspect the crankcase breather.							
XIII.i30	Inspect the exhaust system insulation.							
XIII.i31	Inspect the test that battery terminals are clean and tight.							
XIII.i32	Inspect and check for wire chafing where subject to movement.							
XIII.i33	Check tank vents and overflow piping for obstructions.							
XIII.i34	Inspect fuel piping.							
XIII.i35	Inspect louver motor and controls.							
XIII.i36	Inspect exhaust transfer hangers and supports.							
XIII.i37	Inspect transfer switch main contacts.							
XIII.i38	Check the ignition system of the engine.							
XIII.t	**TESTING**							
	Battery Powered Unit							
XIII.t1	Test each battery powered unit so that the laps operate for 30 seconds.							
XIII.t2	Test the batteries operating the light for 90 mins.							
	Emergency Generators							
XIII.t3	All equipment being powered by the generator must be in place and operating especially Fire Alarm Systems, Fire Pump (if applicable), Emergency Lighting Systems, Exit Signs, Door lock release, Pressurization Fans, Smoke and Heat Control Fans and other Fire Protection and Life Safety Systems.							
XIII.t4	Test the emergency generator batteries for specific gravity or state of charge.							
XIII.t5	Operate the emergency generator with no load.							

XIII.t6	Operate the transfer switch.		
XIII.t7	Test the operation of safeties and alarms.		
XIII.t8	Test emergency generators greater than 600V under full load or under bank-load full load.		
XIII.t9	Test the tank vents and overflow piping.		
XIII. t10	Test the louver motors and controls.		
XIII. t11	Test the exhaust system for excessive exhaust back pressure.		
XIII. t12	Test injector pump and injectors.		
XIII. t13	Measure and record resistance readings of windings with insulation tester (Megger).		
XIII. t14	Exercise the circuit breakers		
XIII. t15	Test the emergency generator under full load or under bank-load full load.		
XIII. t16	For emergency generator serving EPSS facilities, the annual test must run for 4 continuous hours every 3 years		
XV.m	**MAINTENANCE**		
XIII.m1	Clean water from the fuel system.		
XIII.m1	Remove corrosion and clean and dry battery case.		
XIII.m1	Clean the strainer, filter and dirt leg.		
XIII.m1	Clean the crankcase breather.		
XIII.m1	Clean electrical boxes, panels and cabinets.		
XIII.m1	Service air cleaner for the engine.		
XIII.m1	Inspect the brush length and ability to move in holder.		

XIII.m1	Rod out the heat exchanger.					
XIII.m1	Clean the exterior of the radiator.					
XIII.m1	Clean louver motors and controls.					
XIII.m1	Clean the main contacts of the transfer switch.					
XIII.m1	Inspect and clean the commutator and slip rings of the generator.					
XIII.m1	Inspect and clean the rotor and stator for generator.					
XIII.m1	Clean / Change bearings and bearing grease for generator.					
XIII.m1	Inspect and clean voltage regulator.					
XIII.m1	Refer to the manufacturer's instructions for complete maintenance procedures. (Note: May include all necessary daily or weekly activities to complete ITM procedures. Also, may include preventive and corrective maintenance as per recommendation of manufacturer or specialists.)					

Code	Notes / Comments / Resolution: [Key in the code at the beginning of each note (I, II, III, IV, V, or VI).]

☐ **APPROVED** ☐ **REJECTED**

I _____ , hereby declare that the information filled-up on this form is true and correct and that all system and equipment is operational except as noted in the comments section of this guide.

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

EMERGENCY LIGHTING & EPSS
INSPECTION AND TEST FORM (SEMI-ANNUALLY)

Building Name :
Location :
Year :

Remarks
Y - Satisfactory N – Unsatisfactory N/A – Not Applicable

Notes
1. Fill up cells with “Y”, “N”, or “N/A”.
2. Additional comments can be added at the last page of this guide.
3. Methods of Inspection, Testing and Maintenance shall be based on NFPA 101, NFPA 1, NFPA 110, NFPA 111 and/or Manufacturer’s recommendation.

SN	INSPECTION	SA1	SA2
Battery Powered Unit			
1I	Visual inspection of emergency lighting unit to verify that it appears to be in good operating condition and free from physical damage.		
Emergency Generators			
2I	Check the fuel tank supply level.		
3I	Inspect day tank level.		
4I	Inspect and operate the day tank float switch.		
5I	Inspect and operate solenoid valve		
6I	Check for water in Fuel System		
7I	Check the flexible hose and connectors.		
8I	Check the oil level in the engine.		
9I	Check the lube oil heater for operation.		
10I	Check the level of the cooling system for the engine.		
11I	Check the cooling water to the heat exchanger for adequacy.		
12I	Check the adequacy of fresh air through the radiator.		
13I	Check the water pump.		

14I	Check the flexible hose connections.		
15I	Check the jacket water heater.		
16I	Check the exhaust system for leakage.		
18I	Check the drain condensate trap.		
19I	Check the electrolyte levels for the batteries.		
20I	Check the electrical system		
21I	Inspect the engine.		
22I	Check housekeeping in the generator room and fuel supply tanks.		
23I	Inspect the generator.		
24I	Inspect and check the fan and alternator belts.		
25I	Inspect the battery charger and charger rate.		
26I	Check to see that the battery charge is equalized.		
27I	Inspect and check the circuit breakers and fuses.		
28I	Inspect and test the governor oil and linkage.		
29I	Inspect the crankcase breather.		
30I	Inspect the exhaust system insulation.		
31I	Inspect the test that battery terminals are clean and tight.		
32I	Inspect and check for wire chafing where subject to movement.		
TESTING			
	Battery Powered Unit		
1T	Test each battery powered unit so that the laps operate for 30 seconds.		
	Emergency Generators		
2T	All equipment being powered by the generator must be in place and operating especially Fire Alarm Systems, Fire Pump (if applicable), Emergency Lighting Systems, Exit Signs, Door lock release, Pressurization Fans, Smoke and Heat Control Fans and other Fire Protection and Life Safety Systems.		
3T	Test the emergency generator batteries for specific gravity or state of charge.		
4T	Operate the emergency generator with no load.		

5T	Operate the transfer switch.		
6T	Test the operation of safeties and alarms.		
7T	Test emergency generators greater than 600V under full load or under bank-load full load.		
MAINTENANCE			
1M	Clean water from the fuel system.		
2M	Remove corrosion and clean and dry battery case.		
3M	Clean the strainer, filter and dirt leg.		
4M	Clean the crankcase breather.		
5M	Clean electrical boxes, panels and cabinets.		
6M	Service air cleaner for the engine.		
7M	Inspect the brush length and ability to move in holder.		
MAINTENANCE RECORDS : ☐ *reference document :* _____ *(attach if any)*			

SN	**SIGNIFICANT COMMENTS (related to any deficiency / impairment)**
☐ **APPROVED**	☐ **REJECTED**

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

EMERGENCY LIGHTING & EPSS
INSPECTION AND TEST FORM (ANNUALLY)

Building Name :

Location :

Year :

Remarks

Y - Satisfactory N – Unsatisfactory N/A – Not Applicable

Notes

1. Fill up cells with “Y”, “N”, or “N/A”.
2. Additional comments can be added at the last page of this guide.
3. Methods of Inspection, Testing and Maintenance shall be based on NFPA 101, NFPA 1, NFPA 110, NFPA 111 and/or Manufacturer’s recommendation.

SN	INSPECTION	*Remarks: Y N N/A*
1I	Check tank vents and overflow piping for obstructions.	
2I	Inspect fuel piping.	
3I	Inspect louver motor and controls.	
4I	Inspect exhaust transfer hangers and supports.	
5I	Inspect transfer switch main contacts.	
6I	Check the ignition system of the engine.	
TESTING		
1T	Test the tank vents and overflow piping.	
2T	Test the tank vents and overflow piping.	
3T	Test the louver motors and controls.	
4T	Test the exhaust system for excessive exhaust back pressure.	
5T	Test injector pump and injectors.	
6T	Measure and record resistance readings of windings with insulation tester (Megger).	
7T	Exercise the circuit breakers	
8T	Test the emergency generator under full load or under bank-load full load.	

9T	For emergency generator serving EPSS facilities, the annual test must run for 4 continuous hours every 3 years	
MAINTENANCE		
1M	Inspect the brush length and ability to move in holder.	
2M	Rod out the heat exchanger.	
3M	Clean the exterior of the radiator.	
4M	Clean louver motors and controls.	
5M	Clean the main contacts of the transfer switch.	
6M	Inspect and clean the commutator and slip rings of the generator.	
7M	Inspect and clean the rotor and stator for generator.	
9M	Clean / Change bearings and bearing grease for generator.	
10M	Inspect and clean voltage regulator.	

MAINTENANCE RECORDS :

☐ *reference document :* _____ *(attach if any)*

SN	SIGNIFICANT COMMENTS (related to any deficiency / impairment)

☐ **APPROVED** ☐ **REJECTED**

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

XIV. OTHERS

OTHERS

Legend

Semi-Annual | Annually | MR

Remarks

Y - Satisfactory N – Unsatisfactory N/A – Not Applicable

Notes

1. Fill up color shaded cells with “Y”, “N”, or “N/A”.
2. Additional notes can be added at the last page of this guide.
3. Methods / Frequencies WITHOUT COLOR are referred to Manufacturer’s Recommendation / Technical Specialists.

Code	Item	Frequency (Y, N, N/A)	
		CONTRACTOR	
		Semi-annually	Annually
XIV.i	**INSPECTION**		
XIV.i1	Refer to the manufacturer’s instruction or any NFPA applicable codes and standards.		
XIV.t	**TESTING**		
XIV.t1	Refer to the manufacturer’s instruction or any NFPA applicable codes and standards.		
XIV.m	**MAINTENANCE**		
XIV.m1	Refer to the manufacturer’s instruction or any NFPA applicable codes and standards.		

Code	Notes / Comments / Resolution: [Key in the code at the beginning of each note (I, II, III, IV, V, or VI).]

☐ **APPROVED** ☐ **REJECTED**

I _____ , hereby declare that the information filled-up on this form is true and correct and that all system and equipment is operational except as noted in the comments section of this guide.

(Signature above Printed Name) / Date

ITM Contractor

(Signature above Printed Name) / Date

Facility Manager

REFERENCES

NFPA Codes and Standards

NFPA - Fire Protection Systems Inspection Testing & Maintenance Manual

NFPA 1 - Fire Code

NFPA 3 - Recommended Practice for Commissioning and Integrated Testing of Fire Protection and Life Safety Systems

NFPA 101 - Life Safety Code

NFPA 5000 - Building Construction and Safety Code

NFPA 25 - Water Based Fire Protection Systems Handbook

NFPA 10 - Standard for Portable Fire Extinguishers

NFPA 13 - Standard for Installation of Sprinkler System

NFPA 20 - Standard for Installation of Centrifugal Fire Pump

NFPA 72 - National Fire Alarm & Signaling Code

NFPA 92 - Standard for Smoke Control System

NFPA 110 - Standby for Emergency and Standby Power Systems

NFPA 111 - Standby for Stored Electrical Energy Emergency & Standby Power Systems

NFPA 204 - Standard for Smoke and Heat Venting System

NFPA 2001 - Standard on Clean Agent Fire Extinguisher Systems

ANSI A14.1 - Safety Code for Elevators and Escalators

ANSI A17.3 - Safety Code for Existing Elevators and Escalators

International Building Code

British Standards

NEBOSH

other international Code of Practice