

SPRINKLER SYSTEM PM CHECKLIST

SAND2012-2931P

BUILDING: 959

Quarterly Inspection:

Annual Inspection:

Maintenance Zone: 6

MAXIMO PM WORK ORDER NUMBER: _____

INSPECTOR(S): _____ COMPLETION DATE: _____

FIRE PROTECTION ENGINEER REVIEW: _____ DATE: _____

Transmitter: 0959	Area: TA2	MAXIMO #: 1113079	Maint. Zone: 6	NO ACTION Phone #: 284-9649
Building(s): 928, 958, 958H, 959, TP261,262,264,265		FACP: EST QS4-12		Configuration: Addressable

DISABLING FACP INPUTS/OUTPUTS

NACs: SW1 - Disable NACs

HVAC Controls: n/a

Elevator Controls: n/a

Misc. Controls: n/a

Waterflow Devices: M141: Building 928 Riser Pressure Switch
M137: Building 959 Riser Pressure Switch
M139: Building 958 Riser Pressure Switch
M143: Building 958H Riser Pressure Switch

Tampers: M144: Building 958H RPBFP OS&Y, Valve Tampers
M140: Building 958 Low Air Pressure Switch

SPECIAL INSTRUCTIONS

958 SPRINKLER SYSTEM AIR COMPRESSOR:

Location: Equipment Room (MAXIMO# 1029160)

AC Circuit: Panel A, Ckt.# 38

SPRINKLER SYSTEM IMPAIRMENT INSTRUCTIONS

QUARTERLY / ANNUAL MAINTENANCE: (future)

1. Put FACP in "NO ACTION".
2. Activate SW1 to disable NAC circuits.
3. Perform maintenance per the requirements on the MAXIMO Job Plan(s) and document results.
4. After maintenance, restore all disable points and NAC circuits to operation and take FACP off of "NO ACTION".

SPRINKLER SYSTEM OUTAGE:

1. Post Fire Protection Impairment Permit on FACP and verify there is no hot work underway in areas to be impacted by sprinkler outage.
2. Notify EOC and Security of outage to sprinkler riser and to disregard the sprinkler tamper supervisorys that will occur.
3. Disable the following impacted water flow detection devices on the riser being serviced to prevent evacuating building:

M141: Building 928 Riser Pressure Switch
M137: Building 959 Riser Pressure Switch
M139: Building 958 Riser Pressure Switch
M143: Building 958H Riser Pressure Switch

4. Perform maintenance per the requirements on MAXIMO Job Plan(s) and document results.
5. After maintenance, restore all disabled points to operation and remove impairment permit.
6. Notify EOC and Security that sprinkler riser has been restored to normal operation.

BUILDING 959 - ELECTRICAL CHECKLIST

ALM = ALARM SPV = SUPERVISORY TBL = TROUBLE NAC = BELLS/STROBES ACTIVATED

Fire alarm signals generated during tests are received and documented in the fire alarm monitoring station's software.

Sprinkler Water Flow Detection

INPUT ID	POINT/ZONE DESCRIPTOR	FIELD DEVICES	PHOENIX SIGNAL	ZONE	ALM	SPV	TBL	NAC
M137	M137 Bldg 959 Water Flow Alarm	WTM, WPS	Sprinkler Flow	137		XXX	XXX	
M139	M139 Bldg 958 Water Flow Alarm	WTM, WPS	Sprinkler Flow	139		XXX	XXX	
M141	M141 Bldg 928 Water Flow Alarm	WTM, WPS	Sprinkler Flow	141		XXX	XXX	
M143	M143 Bldg 958H Water Flow Alarm	WTM, WPS	Sprinkler Flow	143		XXX	XXX	

Sprinkler Supervisors

INPUT ID	POINT/ZONE DESCRIPTOR	FIELD DEVICES	PHOENIX SIGNAL	ZONE	ALM	SPV	TBL	NAC
M140	M140 Bldg 958 Low Air Pressure	WTM, APS	Low Pressure	140	XXX		XXX	XXX

BUILDING 928 - SPRINKLER RISER PM CHECKLIST

N.E. EQUIPMENT ROOM RISER #1 R-0928-01

MAXIMO #: 1105925

QUARTERLY TESTS

ANNUAL TESTS

Pressure Above Valve: _____ psi

Perform quarterly/ semiannual tests: YES NO N/A

Pressure Below Valve: _____ psi N/A

Backflow preventer - test: N/A. Tests

Main Drain Test Residual Pressure: _____ psi

Backflow preventer - flow test: performed on

Inspector's Test Trip Time: _____ seconds

N/A

Valve to Alarm Open: YES NO N/A

DRY / PREACTION SYSTEM ANNUAL TESTS

Water Motor Gong / Bell Operates: YES NO N/A

Pilot Line Low Air Alarm Pressure: _____ psi

Dry Pipe Compressed Nitrogen Cylinder PSI: _____ psi N/A

Pilot Line Trip Pressure: _____ psi

System Low Air Alarm Pressure: _____ psi

QUARTERLY INSPECTIONS

Sprinkler Riser YES NO N/A

Tripped System Air Pressure: _____ psi

Alarm devices - free of damage:

System Trip Time: _____ sec.

Hydraulic data nameplate on riser:

Priming Water - Test Level: YES NO N/A

Retard chamber/alarm drains not leaking:

ANNUAL INSPECTIONS

Gauges - normal water pressure maintained:

Sprinklers (visible) YES NO N/A

Fire Department Connections (FDC)

Visible and accessible:

No damage or leaks:

Coupling/swivels operate correctly:

Free of corrosion, foreign material, or paint:

Plugs/caps are in place:

Installed in proper orientation:

Gaskets are not damaged:

Fluid in glass bulbs:

Identification signs are in place:

Pipes and Fittings (visible) YES NO N/A

Ball drip valve is functional:

In good condition/no external corrosion:

FDC clapper is functional:

No leaks or mechanical damage:

Correct alignment - no external loads:

Hangers/seismic bracing not damaged, loose:

SEMIANNUAL TESTS

Water Flow Alarm Time to FACP: _____ seconds

FACP Alarm Point: M141

BUILDING 928 - CONTROL VALVE PM CHECKLIST

QUARTERLY INSPECTIONS

ANNUAL TESTS

YES NO N/A

Control Valves YES NO N/A

Perform quarterly/ semiannual tests:

Accessible:

Free from damage or leaks:

Lubricate operating stems of OS&Y valves:

Proper signage:

All control valves operated through full range of motion and returned to normal position to test operation / distribute lubricant:

SEMIANNUAL TESTS

Valve supervisory tamper switches function:

ANNUAL MAINTENANCE YES NO N/A

MAXIMO # FA Point Location

Type

QUARTERLY INSPECTION # of Turns # of Turns

1105931 Outside NE

PIV

to Fully to Fully

Open Shut Locked Close Valve Open Valve

BUILDING 958 - SPRINKLER RISER PM CHECKLIST

EQUIPMENT ROOM RISER #1 R-0958-01

MAXIMO #: 1106333

QUARTERLY TESTS

Pressure Above Valve: _____ psi
 Pressure Below Valve: _____ psi N/A
 Main Drain Test Residual Pressure: _____ psi
 Inspector's Test Trip Time: _____ seconds
 Valve to Alarm Open: YES NO N/A
 Water Motor Gong / Bell Operates: YES NO N/A
 Dry Pipe Compressed Nitrogen Cylinder PSI: _____ psi N/A

ANNUAL TESTS

Perform quarterly/ semiannual tests: YES NO N/A
 Backflow preventer - test: N/A. Tests performed on different W.O.

N/A

DRY / PREACTION SYSTEM ANNUAL TESTS

Pilot Line Low Air Alarm Pressure: _____ psi
 Pilot Line Trip Pressure: _____ psi
 System Low Air Alarm Pressure: _____ psi

QUARTERLY INSPECTIONS

Sprinkler Riser YES NO N/A

Alarm devices - free of damage:
 Hydraulic data nameplate on riser:
 Retard chamber/alarm drains not leaking:
 Gauges - normal water pressure maintained:

Fire Department Connections (FDC)

Visible and accessible:
 Coupling/swivels operate correctly:
 Plugs/caps are in place:
 Gaskets are not damaged:
 Identification signs are in place:
 Ball drip valve is functional:
 FDC clapper is functional:

SEMIANNUAL TESTS

Water Flow Alarm Time to FACP: _____ seconds

FACP Alarm Point: M139

ANNUAL INSPECTIONS

Sprinklers (visible) YES NO N/A
 No damage or leaks:
 Free of corrosion, foreign material, or paint:
 Installed in proper orientation:
 Fluid in glass bulbs:
Pipes and Fittings (visible)
 In good condition/no external corrosion:
 No leaks or mechanical damage:
 Correct alignment - no external loads:
 Hangers/seismic bracing not damaged, loose:

BUILDING 958 - CONTROL VALVE PM CHECKLIST

QUARTERLY INSPECTIONS

Control Valves YES NO N/A

Accessible:
 Free from damage or leaks:
 Proper signage:

ANNUAL TESTS

Perform quarterly/ semiannual tests:
 Lubricate operating stems of OS&Y valves. All control valves operated through full range of motion and returned to normal position to test operation / distribute lubricant:

SEMIANNUAL TESTS

Valve supervisory tamper switchs function:

MAXIMO #

FA Point

Location

Type

1105916

S.E. Yard

PIV

1105924

Equipment Rm

Valve

ANNUAL MAINTENANCE
QUARTERLY INSPECTION # of Turns to Fully Open # of Turns to Fully Close Valve Open Valve

Open	Shut	Locked	Close Valve	Open Valve
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____

BUILDING 958H - SPRINKLER RISER PM CHECKLIST

ROOM 1 RISER #1 R-0958H-01

MAXIMO #: 1112111

QUARTERLY TESTS

Pressure Above Valve: _____ psi

Pressure Below Valve: _____ psi N/A

Main Drain Test Residual Pressure: _____ psi

Inspector's Test Trip Time: _____ seconds

Valve to Alarm Open: YES NO N/A

Water Motor Gong / Bell Operates: YES NO N/A

Dry Pipe Compressed Nitrogen Cylinder PSI: _____ psi N/A

QUARTERLY INSPECTIONS

Sprinkler Riser YES NO N/A

Alarm devices - free of damage:

Hydraulic data nameplate on riser:

Retard chamber/alarm drains not leaking:

Gauges - normal water pressure maintained:

Fire Department Connections (FDC)

Visible and accessible:

Coupling/swivels operate correctly:

Plugs/caps are in place:

Gaskets are not damaged:

Identification signs are in place:

Ball drip valve is functional:

FDC clapper is functional:

SEMIANNUAL TESTS

Water Flow Alarm Time to FACP: _____ seconds

FACP Alarm Point: M143

ANNUAL TESTS

Perform quarterly/ semiannual tests: YES NO N/A

Backflow preventer - test: N/A. Tests performed on different W.O.

Backflow preventer - flow test: _____

N/A

DRY / PREACTION SYSTEM ANNUAL TESTS

Pilot Line Low Air Alarm Pressure: _____ psi

Pilot Line Trip Pressure: _____ psi

System Low Air Alarm Pressure: _____ psi

Tripped System Air Pressure: _____ psi

System Trip Time: _____ sec.

Priming Water - Test Level: YES NO N/A

ANNUAL INSPECTIONS

Sprinklers (visible) YES NO N/A

No damage or leaks:

Free of corrosion, foreign material, or paint:

Installed in proper orientation:

Fluid in glass bulbs:

Pipes and Fittings (visible)

In good condition/no external corrosion:

No leaks or mechanical damage:

Correct alignment - no external loads:

Hangers/seismic bracing not damaged, loose:

BUILDING 958H - CONTROL VALVE PM CHECKLIST

QUARTERLY INSPECTIONS

Control Valves YES NO N/A

ANNUAL TESTS

YES NO N/A

Perform quarterly/ semiannual tests:

Accessible:

Free from damage or leaks:

Lubricate operating stems of OS&Y valves. All control valves operated through full range of motion and returned to normal position to test operation / distribute lubricant:

Proper signage:

SEMIANNUAL TESTS

Valve supervisory tamper switchs function:

MAXIMO # FA Point Location Type

1110880 N.E. Yard PIV

1112114 M144 Room 1 Valve

1112113 M144 Room 1 Valve

1112112 M144 Room 1 RPBFP OS&Y #1

1112112 M144 Room 1 RPBFP OS&Y #2

QUARTERLY INSPECTION

ANNUAL MAINTENANCE # of Turns to Fully Open # of Turns to Fully Open

Open Shut Locked Close Valve Open Valve

BUILDING 959 - SPRINKLER RISER PM CHECKLIST

EAST RISER #1 R-0959-01

MAXIMO #: 1033909

QUARTERLY TESTS

Pressure Above Valve: _____ psi

Pressure Below Valve: _____ psi N/A

Main Drain Test Residual Pressure: _____ psi

Inspector's Test Trip Time: _____ seconds

Valve to Alarm Open: YES NO N/A

Water Motor Gong / Bell Operates: YES NO N/A

Dry Pipe Compressed Nitrogen Cylinder PSI: _____ psi N/A

QUARTERLY INSPECTIONS

Sprinkler Riser YES NO N/A

Alarm devices - free of damage:

Hydraulic data nameplate on riser:

Retard chamber/alarm drains not leaking:

Gauges - normal water pressure maintained:

Fire Department Connections (FDC)

Visible and accessible:

Coupling/swivels operate correctly:

Plugs/caps are in place:

Gaskets are not damaged:

Identification signs are in place:

Ball drip valve is functional:

FDC clapper is functional:

SEMIANNUAL TESTS

Water Flow Alarm Time to FACP: _____ seconds

FACP Alarm Point: M137

ANNUAL TESTS

Perform quarterly/ semiannual tests: YES NO N/A

Backflow preventer - test: N/A. Tests performed on different W.O.

N/A

DRY / PREACTION SYSTEM ANNUAL TESTS

Pilot Line Low Air Alarm Pressure: _____ psi

Pilot Line Trip Pressure: _____ psi

System Low Air Alarm Pressure: _____ psi

Tripped System Air Pressure: _____ psi

System Trip Time: _____ sec.

Priming Water - Test Level: YES NO N/A

ANNUAL INSPECTIONS

Sprinklers (visible) YES NO N/A

No damage or leaks:

Free of corrosion, foreign material, or paint:

Installed in proper orientation:

Fluid in glass bulbs:

Pipes and Fittings (visible) YES NO N/A

In good condition/no external corrosion:

No leaks or mechanical damage:

Correct alignment - no external loads:

Hangers/seismic bracing not damaged, loose:

BUILDING 959 - CONTROL VALVE PM CHECKLIST

QUARTERLY INSPECTIONS

Control Valves YES NO N/A

ANNUAL TESTS

YES NO N/A

Perform quarterly/ semiannual tests:

Accessible:

Lubricate operating stems of OS&Y valves.

All control valves operated through full range of motion and returned to normal position to test operation / distribute lubricant:

Free from damage or leaks:

Proper signage:

SEMIANNUAL TESTS

Valve supervisory tamper switchs function:

MAXIMO # FA Point Location

Type

ANNUAL MAINTENANCE

QUARTERLY INSPECTION # of Turns to Fully Open # of Turns to Fully Open

Open Shut Locked Close Valve Open Valve

1033872 West PIV _____ _____

1033884 1" East Valve _____ _____

1033885 2-1/2" East Valve _____ _____

PM NOTES:

1. Main drain residual pressure test results should not differ more than 10% from previous test results.
2. Perform main drain test annually for sprinkler risers without backflow preventers.
3. Water flow alarm must be received at fire alarm control panel (FACP) within 90 seconds of Inspector Test valve activation.
4. Dry system must deliver water to Inspector's Test (IT) connection within 90 seconds of opening IT valve.

COMMENTS:

