FIRE PUMP WEEKLY OPERATING TESTS

Property Name: _____ **Inspector:** _____

Property Address: _____ **Contract No.:** _____

Property Phone Number: _____ **Date:** _____

Inspections: Weekly

			Pump Systems
☐ Yes	☐ No	☐ N/A	Operate fire pump for 10 minutes (30 minutes for diesel pump)
☐ Yes	☐ No	☐ N/A	Check packing gland tightness (slight leak at no flow)
☐ Yes	☐ No	☐ N/A	Record suction pressure from gauge in _____ psi
☐ Yes	☐ No	☐ N/A	Record discharge pressure from gauge in _____ psi
☐ Yes	☐ No	☐ N/A	Adjust gland nuts if necessary
☐ Yes	☐ No	☐ N/A	Check for unusual noise or vibration
☐ Yes	☐ No	☐ N/A	Check packing boxes, bearings, or pump casing for overheating
☐ Yes	☐ No	☐ N/A	Record pump starting pressure _____ psi
☐ Yes	☐ No	☐ N/A	Record pumps highest _____ psi and lowest _____ psi pressure on the fire pump control log
☐ Yes	☐ No	☐ N/A	Circulation relief valve functions correctly
☐ Yes	☐ No	☐ N/A	Check fuel system solenoids for proper operation (Alternative ITM A.8.1.1.2)
☐ Yes	☐ No	☐ N/A	Check tank float switch for proper operation (Alternative ITM A.8.1.1.2)
			Electrical Systems
☐ Yes	☐ No	☐ N/A	Record time controller is on first step (for reduced voltage or reduced current starting)
☐ Yes	☐ No	☐ N/A	Observe time for motor to accelerate to full speed
☐ Yes	☐ No	☐ N/A	Record time pump runs after starting for pumps having automatic stop feature
			Diesel Engine Systems
☐ Yes	☐ No	☐ N/A	Record time for diesel engine to crank
☐ Yes	☐ No	☐ N/A	Record time for diesel engine to reach running speed
☐ Yes	☐ No	☐ N/A	Check oil pressure gauge, speed indicator and water and oil temperatures while engine is running
☐ Yes	☐ No	☐ N/A	Check heat exchanger for cooling water flow
☐ Yes	☐ No	☐ N/A	Operate speed governor (internal combustion engine only)
			Steam System
☐ Yes	☐ No	☐ N/A	Observe the time for turbine to reach running speed
☐ Yes	☐ No	☐ N/A	Record steam pressure for steam-operated pumps

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FIRE PUMP WEEKLY OPERATING TESTS (Continued)

Inspections: Weekly

☐ Yes	☐ No	☐ N/A	Check steam trap
☐ Yes	☐ No	☐ N/A	Check steam relief valve

Record any notes that the inspector believes to be significant in the corresponding action's comments field.

Comments

Signature: _____ Date: _____

Contractor Name: _____

Contractor Address: _____

License/Certification No.: _____

Controller: Work shall be completed, to the extent that such work can be completed without opening an energized electric motor-driven fire pump controller.

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FIRE PUMP MONTHLY INSPECTION, TESTING, AND MAINTENANCE

Property Name: _____ **Inspector:** _____

Property Address: _____ **Contract No.:** _____

Property Phone Number: _____ **Date:** _____

Frequency: Monthly			Action	Electric Fire Pump
☐ Yes	☐ No	☐ N/A	Test	Non-flow test — operate 10 minutes
☐ Yes	☐ No	☐ N/A	Test	Check packing gland tightness (slight leak at no flow)
☐ Yes	☐ No	☐ N/A	Test	Record suction pressure from gauge _____ psi (bar)
☐ Yes	☐ No	☐ N/A	Test	Record discharge pressure from gauge _____ psi (bar)
☐ Yes	☐ No	☐ N/A	Test	Adjust gland nuts if necessary
☐ Yes	☐ No	☐ N/A	Test	Check for unusual noise or vibration
☐ Yes	☐ No	☐ N/A	Test	Check packing boxes, bearings, or pump casing for overheating
☐ Yes	☐ No	☐ N/A	Test	Record pump starting pressure
☐ Yes	☐ No	☐ N/A	Test	Record pumps highest _____ psi and lowest _____ psi pressure on the fire pump control log
☐ Yes	☐ No	☐ N/A	Test	Circulation relief valve functions correctly
☐ Yes	☐ No	☐ N/A	Test	Record time controller is on first step (for reduced voltage or reduced current starting)
				Electrical System
☐ Yes	☐ No	☐ N/A	Test	Exercise isolating switch and circuit breaker (Alternative ITM A.8.1.1.2)
☐ Yes	☐ No	☐ N/A	Inspect	Circuit breakers or fuses (Alternative ITM A.8.1.1.2)
				Battery System
☐ Yes	☐ No	☐ N/A	Inspect	Case exterior clean and dry (Alternative ITM A.8.1.1.2)
☐ Yes	☐ No	☐ N/A	Test	Specific gravity or state of charge (Alternative ITM A.8.1.1.2)
☐ Yes	☐ No	☐ N/A	Inspect	Charger and charge rate (Alternative ITM A.8.1.1.2)
☐ Yes	☐ No	☐ N/A	Inspect	Equalize charge (Alternative ITM A.8.1.1.2)

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FIRE PUMP MONTHLY INSPECTION, TESTING, AND MAINTENANCE (Continued)

Comments:

Comments: _____ Date: _____

Contractor Name: _____

Contractor Address: _____

License/Certification No.: _____

Controller: Work shall be completed, to the extent that such work can be completed without opening an energized electric motor-driven fire pump controller.

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FIRE PUMP QUARTERLY INSPECTION, TESTING, AND MAINTENANCE

Property Name: _____ **Inspector:** _____

Property Address: _____ **Contract No.:** _____

Property Phone Number: _____ **Date:** _____

Frequency: Quarterly			Action	Diesel Engine System
				Fuel
☐ Yes	☐ No	☐ N/A	Clean	Strainer, filter, or dirt leg, or combination thereof (Alternative ITM A.8.1.1.2)
				Lubrication System
☐ Yes	☐ No	☐ N/A	Inspect/Change/Test	Crankcase breather (Alternative ITM A.8.1.1.2)
				Cooling System
☐ Yes	☐ No	☐ N/A	Clean	Water strainer (Alternative ITM A.8.1.1.2)
				Exhaust System
☐ Yes	☐ No	☐ N/A	Inspect	Insulation and fire hazards (Alternative ITM A.8.1.1.2)
				Battery System
☐ Yes	☐ No	☐ N/A	Inspect	Terminals clean and tight (Alternative ITM A.8.1.1.2)
				Electrical System
☐ Yes	☐ No	☐ N/A	Inspect	Wire chafing where subject to movement (Alternative ITM A.8.1.1.2)

Comments:

Signature: _____ Date: _____

Contractor Name: _____

Contractor Address: _____

License/Certification No.: _____

Controller: Work shall be completed, to the extent that such work can be completed without opening an energized electric motor-driven fire pump controller.

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FIRE PUMP SEMIANNUAL INSPECTION, TESTING, AND MAINTENANCE

Property Name: _____ **Inspector:** _____

Property Address: _____ **Contract No.:** _____

Property Phone Number: _____ **Date:** _____

Frequency: Semiannual			Action	Electric Fire Pump System
				Electrical System
☐ Yes	☐ No	☐ N/A	Test	Operate manual starting means (Alternative ITM A.8.1.1.2)
				Diesel Engine System
				Cooling System
☐ Yes	☐ No	☐ N/A	Test	Antifreeze protection level (Alternative ITM A.8.1.1.2)
				Exhaust System
☐ Yes	☐ No	☐ N/A	Inspect	Flexible exhaust section (Alternative ITM A.8.1.1.2)
				Electrical System
☐ Yes	☐ No	☐ N/A	Inspect/Test	Operation of safeties and alarms (Alternative ITM A.8.1.1.2)
☐ Yes	☐ No	☐ N/A	Clean	Boxes, panels, and cabinets (Alternative ITM A.8.1.1.2)

Comments:

Signature: _____ Date: _____

Contractor Name: _____

Contractor Address: _____

License/Certification No.: _____

Controller: Work shall be completed, to the extent that such work can be completed without opening an energized electric motor-driven fire pump controller.

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FIRE PUMP ANNUAL INSPECTION, TESTING, AND MAINTENANCE

Property Name: _____ **Inspector:** _____

Property Address: _____ **Contract No.:** _____

Property Phone Number: _____ **Date:** _____

Frequency: Annual			Action	Electric Fire Pump
				Pump System
☐ Yes	☐ No	☐ N/A	Inspect/Change (as needed)	Lubricate bearings
☐ Yes	☐ No	☐ N/A	Test	Power transfer switch
☐ Yes	☐ No	☐ N/A	Inspect	Check parallel and angular alignment
☐ Yes	☐ No	☐ N/A	Test	Main relief valve
☐ Yes	☐ No	☐ N/A	Inspect	Check flexible hoses and connections
☐ Yes	☐ No	☐ N/A	Inspect	Check plumbing parts — inside and outside panels
☐ Yes	☐ No	☐ N/A	Inspect	Check pump shaft end play
☐ Yes	☐ No	☐ N/A	Inspect/Change	Check accuracy of pressure gauges and sensors
☐ Yes	☐ No	☐ N/A	Inspect	Pump coupling alignment
				Mechanical Transmission
☐ Yes	☐ No	☐ N/A	Change	Lubricate coupling (Alternative ITM A.8.1.1.2)
☐ Yes	☐ No	☐ N/A	Change	Lubricate right angle gear drive (Alternative ITM A.8.1.1.2)
				Electrical System
☐ Yes	☐ No	☐ N/A	Inspect	Corrosion on printed circuit boards
☐ Yes	☐ No	☐ N/A	Inspect	Cracked cable/wire insulation
☐ Yes	☐ No	☐ N/A	Test	Electronic control module (ECM)
☐ Yes	☐ No	☐ N/A	Maintenance	Sacrificial anode
☐ Yes	☐ No	☐ N/A	Test	Trip circuit breaker (Alternative ITM A.8.1.1.2)
☐ Yes	☐ No	☐ N/A	Inspect/Test	Operate emergency manual starting means (Alternative ITM A.8.1.1.2)
☐ Yes	☐ No	☐ N/A	Inspect	Lubricate mechanical moving parts (except starters and relays) (Alternative ITM A.8.1.1.2)
☐ Yes	☐ No	☐ N/A	Inspect	Calibrate pressure switch settings (Alternative ITM A.8.1.1.2)
☐ Yes	☐ No	☐ N/A	Inspect	Lubricate motor bearings (Alternative ITM A.8.1.1.2)
☐ Yes	☐ No	☐ N/A	Inspect	Leaks in plumbing parts (Alternative ITM A.8.1.1.2)
☐ Yes	☐ No	☐ N/A	Inspect	Signs of water on electrical parts (Alternative ITM A.8.1.1.2)
				Diesel Engine System
				Pump System
☐ Yes	☐ No	☐ N/A	Test	Main relief valve
				Fuel
☐ Yes	☐ No	☐ N/A	Test	Diesel fuel
☐ Yes	☐ No	☐ N/A	Test	Fuel pump alarm signals
☐ Yes	☐ No	☐ N/A	Maintenance	Active fuel maintenance system
☐ Yes	☐ No	☐ N/A	Clean	Strainer/filter
☐ Yes	☐ No	☐ N/A	Clean	Water/foreign material in tank
☐ Yes	☐ No	☐ N/A	Inspect/Test	Tank vents and overflow piping unobstructed
☐ Yes	☐ No	☐ N/A	Inspect	Fuel tank piping (Alternative ITM A.8.1.1.2)

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FIRE PUMP ANNUAL INSPECTION, TESTING, AND MAINTENANCE (Continued)

Frequency: Annual				
				Lubrication System
☐ Yes	☐ No	☐ N/A	Change	Oil change (50 hour maximum)
☐ Yes	☐ No	☐ N/A	Change	Oil filter(s) (50 hour maximum)
				Cooling System
☐ Yes	☐ No	☐ N/A	Maintenance	Replace circulating water filter
☐ Yes	☐ No	☐ N/A	Test	Supervisory signal for high cooling water temperature
☐ Yes	☐ No	☐ N/A	Inspect	Antifreeze (Alternative ITM A.8.1.1.2)
☐ Yes	☐ No	☐ N/A	Clean	Heat exchanger (Alternative ITM A.8.1.1.2)
☐ Yes	☐ No	☐ N/A	Inspect/Change	Duct work/louvers (Alternative ITM A.8.1.1.2)
				Exhaust System
☐ Yes	☐ No	☐ N/A	Inspect	Check exhaust system and drain condensate trap
☐ Yes	☐ No	☐ N/A	Test	Check for excessive backpressure
☐ Yes	☐ No	☐ N/A	Inspect	Hangers and support in good condition (Alternative ITM A.8.1.1.2)
				Battery System
☐ Yes	☐ No	☐ N/A	Maintenance	Check specific gravity, state of charge, and charger rates
☐ Yes	☐ No	☐ N/A	Maintenance	Clean terminals
☐ Yes	☐ No	☐ N/A	Maintenance	Check battery cranking voltage exceeds 9 volts for a 12 volt system and 18 volts for a 24 volt system
				Electrical System
☐ Yes	☐ No	☐ N/A	Inspect	Corrosion on printed circuit boards
☐ Yes	☐ No	☐ N/A	Test	Electrical control module (ECM)
☐ Yes	☐ No	☐ N/A	Inspect	Tighten control and power wiring connectors (Alternative ITM A.8.1.1.2)
☐ Yes	☐ No	☐ N/A	Inspect	Voltmeter and ammeter for accuracy (5%) (Alternative ITM A.8.1.1.2)
☐ Yes	☐ No	☐ N/A	Inspect	Cracked cable/wire insulation (Alternative ITM A.8.1.1.2)
☐ Yes	☐ No	☐ N/A	Inspect	Leaks in plumbing parts (Alternative ITM A.8.1.1.2)
☐ Yes	☐ No	☐ N/A	Inspect	Signs of water on electrical parts (Alternative ITM A.8.1.1.2)

Comments:

Signature: _____ Date: _____

Contractor Name: _____

Contractor Address: _____

License/Certification No.: _____

Controller: Work shall be completed, to the extent that such work can be completed without opening an energized electric motor-driven fire pump controller.

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