

Water-Based Fire Protection System Inspection Guidelines for Tagging - 2011 NFPA 25					
Inspection Deficiencies, Testing Deficiencies and Maintenance Deficiencies (Revised 5-25-2016)					
Item	Deficiency	Tag	NFPA	Action	Reference
FIRE PUMP					NFPA #25
Pump house/room	Heat not adequate, temperature less than 40° F (less than 70° F for diesel pumps without engine heaters)	Red	Critical	24 hour notice	8.2.2 (1)
Pump house/room	Ventilating louvers not free to operate	Red	Critical	24 hour notice	8.2.2 (1)
Pump system	Suction reservoir not full, wet pit suction screens missing	Red	Critical	24 hour notice	8.2.2 (2)
Pump system	Suction, discharge and bypass valves not fully open, pipe leaking, suction line & system line pressure not within acceptable range, wet pit suction screens obstructed	Red	Impairment	24 hour notice	8.2.2 (2)
Electrical system	No electrical power - Controller pilot light not illuminated, transfer switch pilot light not illuminated, isolating switch not closed, reverse phase alarm pilot light on or normal phase light is off, oil level in vertical motor sight glass not normal	Red	Impairment	24 hour notice	8.2.2 Table 8.1.2
Electrical system	Circuit breakers and fuses over 2 years old,	Red	Critical	24 hour notice	Table 8.5.3
Electrical system	Electrical power is provided - controller pilot light not illuminated, transfer switch pilot light not illuminated, reverse phase alarm pilot light on or normal phase light is not illuminated	Yellow	Noncritical	30 day notice	8.2.2
Diesel engine system	Fuel tank less than two-thirds full, controller selector switch not in auto position, battery voltage readings not normal, battery charging current not normal, battery pilot lights off or battery failure pilot lights on, alarm pilot lights are on, engine running time meter not reading, oil level in right angle gear drive not normal, crankcase oil level not normal, cooling water level not normal, electrolyte level in batteries not normal, battery terminals corroded, water-jacket heater not operating	Red	Critical	24 hour notice	8.2.2 (4)
Steam system	Steam pressure gauge reading not normal	Red	Critical	24 hour notice	8.2.2 (5)
Fire pump test	Pump did not start automatically, electric pump did not run 10 minutes, diesel pump did not run 30 minutes	Red	Impairment	24 hour notice	8.3.2.3 8.3.2.4
Fire pump test - pump system	System suction and discharge gauge reading, or pump starting pressure not acceptable	Red	Impairment	24 hour notice	8.3.2.8(1)
Fire pump test - pump system	Pump packing gland discharge not acceptable, unusual noise or vibration, packing boxes, bearings or pump casing overheating	Red	Critical	24 hour notice	8.3.2.8(1)
Fire pump test - electrical system	Time for motor to accelerate to full speed, time controller is on first step or time pump runs after starting not acceptable	Red	Impairment	24 hour notice	8.3.2.8(4)
Fire pump test - diesel engine system	Time for engine to crank and time for engine to reach running speed not acceptable, low rpm, low oil pressure, high temperature, high cooling water pressure	Red	Critical	24 hour notice	8.3.2.8(3)
Fire pump test - steam system	Gauge reading and time for turbine to reach running speed not acceptable	Red	Impairment	24 hour notice	8.3.3.5
Fire pump annual test	Churn condition not maintained for 30 minutes, circulation relief valve and/or pressure relief valve and/or pressure relief valve did not work properly	Red	Critical	24 hour notice	8.3.3.2 8.3.2.4
Fire pump annual test	Pressure relief valve did not work properly at each flow condition	Red	Critical	24 hour notice	8.3.3.3
Fire pump annual test (with transfer switch)	Overcurrent protective devices opened when simulating a power failure condition at peak load, power not transferred to alternate source, pump did not continue to perform at peak load, pump did not reconnect to normal power after removing power failure condition	Red	Impairment	24 hour notice	8.3.3.4
Fire pump annual test	Alarms did not properly operate	Yellow	Noncritical	30 day notice	8.3.3.5
Pump house/room	Heating, lighting, ventilating systems did not pass test	Red	Critical	24 hour notice	8.3.4.3
Fire pump annual test	Parallel or angular alignment was not correct	Red	Critical	24 hour notice	8.3.4.4
Fire pump annual test	Flow test results are not within 5% of acceptance test or nameplate	Red	Critical	24 hour notice	8.3.5.4
Fire pump annual test	Voltage readings at the motor are not within 5% below or 10% above the rated (nameplate)	Red	Critical	24 hour notice	8.3.5.6
WATER STORAGE TANK					NFPA #25
Water level	Water level and/or condition not correct	Red	Critical	24 hour notice	9.2.1
Air pressure	Air pressure in pressure tanks not correct	Red	Impairment	24 hour notice	9.2.2
Heating system	Heating system not operational, water temperature below 40°F	Red		30 day notice	9.2.3
Exterior	Tank exterior, supporting structure, vents, foundation, catwalks or ladders where provided damaged	Yellow	Noncritical	30 day notice	9.2.5.1
Exterior	Area around tank has fire exposure hazard in form of combustible storage, trash, debris, brush or material	Yellow	Noncritical	30 day notice	9.2.5.2
Exterior	Accumulation of material on or near parts that could result in accelerated corrosion or rot	Yellow	Noncritical	30 day notice	9.2.5.2
Exterior	Ice buildup on tank and support	Red	Critical	24 hour notice	9.2.5.2
Exterior	Erosion exists on exterior sides or top of embankments supporting coated fabric tanks	Yellow	Noncritical	30 day notice	9.2.5.2
Exterior	Expansion joints leaking or cracking	Red	Critical	24 hour notice	9.2.5.3
Exterior	Hoops and grills of wooden tanks in poor condition	Yellow	Noncritical	30 day notice	9.2.5.4
Exterior	Exterior painted, coated, or insulated surfaces of tanks or supporting structure degraded	Yellow	Noncritical	30 day notice	9.2.5.5
Interior (pressure tanks or steel tanks w/o corrosion protection every 3 years, all others every 5 years)	Pitting, corrosion, spalling, rot, other forms of deterioration, waste materials exist, aquatic growth, local or general failure of interior coating	Yellow	Noncritical	30 day notice	9.2.6.3
	Void beneath floor with sand in the middle of tanks on ring type foundations	Yellow	Noncritical	30 day notice	9.2.6.5
	Heating system components or piping in poor condition	Yellow	Noncritical	30 day notice	9.2.6.6
	Blockage of anti-vortex plate	Red	Impairment	24 hour notice	9.2.6.7
	Deterioration of anti-vortex plate	Red	Critical	24 hour notice	9.2.6.7
Interior testing	Tank coating did not pass adhesion, coating thickness or wet sponge test	Yellow	Noncritical	30 day notice	9.2.7
Interior testing	Tank walls and bottoms did not pass ultrasonic test	Yellow	Noncritical	30 day notice	9.2.7
Interior testing	Tank bottom seams did not pass vacuum-box test	Yellow	Noncritical	30 day notice	9.2.7
Testing	Level indicator not tested after 5 years, lacked freedom of movement or not accurate	Yellow	Noncritical	30 day notice	9.3.1
Testing	Low water temperature alarm did not pass test	Yellow	Noncritical	30 day notice	9.3.3
Testing	High water temperature limit switch did not pass test	Yellow	Noncritical	30 day notice	9.3.4
Testing	High and low water level alarms did not pass test	Red	Critical	24 hour notice	9.3.5
Gauges	Not replaced or calibrated in 5 years, not accurate within 3% of scale	Yellow	Noncritical	30 day notice	9.3.6