

EXHIBIT C

NFPA 25 Fire Protection Equipment Testing Recommendations and Frequencies

Fire Pumps:

Fire pumps should be test started via the automatic starting mechanism *weekly* (pump churn tests) and flow tested *annually*.

- Electric motor driven fire pumps should be run for at least 10 min. Pump suction and discharge pressures should be recorded and the pump
- Diesel driven fire pumps should be run for at least 30 min. at rated speed. Pump suction and discharge pressures should be recorded. In addition, the fuel tank level should be checked and maintained at least 3/4 full, the quality and quantity of crankcase oil should be checked and the batteries and battery charger should be inspected for proper operating conditions. Other components and conditions should be checked as per NFPA 20 and NFPA 25.
- The fire pump should be annually flow tested at near 100% and 150% rated conditions.

Automatic Sprinkler and Fire Protection Control Valves:

Automatic sprinkler and fire protection control valves should be visually inspected for the locked and open position on a *monthly* basis.

Post indicating valves (PIV's) and wall post indicating valves (WPIV's) should be physically tested at least *annually* and *semi-annually* if tampered. All valves should be fully closed and re-opened *annually*.

All valves should be individually listed on the fire inspection report.

A responsible employee and alternate should be assigned so the inspections are performed properly. Completed inspection records should be reviewed by management for correction of any noted deficiencies and kept on file.

Waterflow Alarms:

These should be tested *quarterly* by flowing from the Inspector's Test Connection for each system.

Alarms should be received from the central station alarm company, which should be contacted before (to alert them of the tests) and after (to confirm all signals were received) the tests are performed.

Valve Tamper Alarms:

These should be tested *semi-annually*. Each fire protection control valve should be partially or fully shut and re-opened to confirm the valve tamper alarms are functioning properly. Alarms should be received from the central station alarm company, which should be contacted before (to alert them of the tests) and after (to confirm all signals were received) the tests are performed.

2 in. Drain Flow Tests:

Main or 2 in. drain flow tests should be performed for each individual sprinkler riser and should be completed at least *annually*.

Flow alarms may be transmitted to the central station alarm company, which should be contacted before (to alert them of the tests) and after the tests are performed.

Dry Pipe Sprinkler Systems:

Recorded trip tests of each dry pipe valve should be performed *annually*.

Preaction Sprinkler Systems:

Recorded trip tests of each preaction/deluge valve should be performed *annually*.

Fire Doors:

All fire doors should be visually inspected *weekly* and tested *annually*.

Other General Fire Inspection and Housekeeping Items:

Inspections should be conducted for all other fire protection equipment and general conditions.

A responsible employee and alternate should be assigned so the inspections are performed properly. Completed inspection records should be reviewed by management for correction of any noted deficiencies and kept on file.

Housekeeping items related to fire protection include:

- Maintaining a minimum 3 ft. clearance between ceiling sprinklers and rack storage
- Maintaining a minimum 3 ft. clearance between combustible storage and all electrical panels/equipment
- Maintaining a minimum 5 ft. clearance between combustible storage and all heating units or heat producing equipment
- Maintaining a minimum 5 ft. clearance between storage and fire doors
- Aisles between racks should be maintained free of storage