ANSUL R102 FIRE SUPPRESSION SYSTEM MAINTENANCE SCHEDULE

The schedule of maintenance will be as follows:

1. The specification has been prepared to meet the requirements of our survey.

2. maintenance to be carried out generally in accordance with Ansul requirements and the N.P.F.A 96 Standard.

Safety Procedures

3. Ensure alarm interfaces and other connections are isolated.
4. Remove enclosure covers and store safely.
5. Insert lock bar onto the cocked regulator.
6. Remove all expellant cartridges and install safety caps.

Actuation Lines

7. Inspect all actuation lines connected to the Automan, ensure they are correct, securely tightened and intact. Check for leaks, there are 2 methods of leak checking manual page 8-1 point 5.
8. Remove gasket from cartridge receiver check and replace if necessary. Lightly coat with a good grade of extreme temperature grease and re-install.

Wet Chemical Agent

9. Disconnect expellant gas hoses or piping unions from all tanks in system.
10. Disconnect discharge pipe unions and remove all tanks.
11. Remove adapter/tube assembly (Dip tube) from tanks and ensure fill levels are within the specified tolerances (manual page 5-2.1 fig 6).
    a. Inspect threads on each tank adapter and tank shoulder for nicks, burrs or cross threading.
    b. Clean and coat O-Rings with a good grade of extreme temperature grease and re-install.
    c. Remove vent plugs inspect for free movement and corrosion, replace if necessary. Re-install vent plug.
    d. Ensure bursting disc is in place and silver side is away from tank.
    e. Clean seating surface and re-tighten adapter/tube assembly (Dip tube) to tanks

12. Return inspected tanks to enclosures and carefully assembly and wrench tighten expellant hoses or piping unions and distribution piping.

Discharge Nozzles

13. Remove Blow off caps and inspect. Replace if deteriorated (replace after 1 year). Inspect O-Ring on metal caps and replace if necessary.
14. Verify that all nozzle types, mounting locations and aim points are correct (record information if incorrect) ensure nozzles are free of cooking grease build up and have a thin coating of silicone grease across the orifice. (do not allow silicone grease to enter nozzle orifice)
15. If there is evidence of cooking grease, agent residue or other residue in the nozzle the distribution piping must be inspected/cleaned.

Manual & Automatic Activation

16. Ensure system is isolated from any interfaces present, remove the lock bar and manually operate the remote pull station. Verify the regulated release mechanism operates correctly.
17. Inspect pull station cover for damage or wear, replace if necessary.
18. Cock the regulated release mechanism and re-insert lock bar.
19. Ensure system is isolated from any interfaces present and test the snap action switch (manual page 8-3 point 18 a to d)
20. Raise tension lever to "Up" position and install test link in terminal detector.
21. Lower tension lever to "Down" position and cut test link to simulate automatic detection. Adjust if necessary and re-test (manual page 6-3) Verify successful actuation.
22. Raise tension lever to "Up" position and install new fusible links to all detectors. Destroy old links. For "scissor" style linkages locate linkage position all the way to terminal end of detection run.
23. Inspect wire rope (at pulley elbows, detector locations and Automan) replace if wire shows signs wear or fraying.
24. Lower tension lever to "Down" position. Cock the regulated release mechanism and re-insert lock bar.
25. Inspect the wire rope locking clamp ensure correct clearance (manual page 8-4 point 28)

Additional steps if required

26. Test Mechanical Gas valve as per manual page 8-3 point 30
27. Inspect Agent distribution hose as per manual page 8-3 point 42
28. Reset any additional equipment (manual section 7 Recharge and Resetting Procedures)

Resetting

29. Remove safety caps from each expellant cartridges and weigh. Replace if 14.2g or more below the weight stamped on cartridge.
30. Ensure Regulated release is cocked and lock bar is installed. Return all cartridges into Automan/Actuators and hand tighten.
31. Ensure tension lever is in "Down" position and remove lock bar.
32. Re-secure covers to all enclosures
33. Complete all paperwork in accordance with Global procedures (including reporting any remedial works required).

Blow Through Test

Disconnect the distribution piping from the agent tanks and use dry air or nitrogen to blow through the piping and verify discharge at each nozzle location (manual page 8-5 point 1) this must be undertaken on **Every Service visit.**

Additional 10 year Maintenance Examination

34. In addition to the above for 10 year old systems, the 10 yearly maintenance examination must be carried out in accordance with manual page 8-5.

    Note: It is strongly recommended that Ansul R-102 systems are inspected and serviced following hood and duct cleaning operations to ensure the system is not rendered ineffective due to cleaning product contamination or mishandling of the equipment.

35. A maintenance log will be left on site to record all maintenance and service visits.

36. On completion of maintenance, a certificate of inspection/engineers report will be issued.

37. We propose a bi-annual service and please find enclosed, two copies of the proposed maintenance contract. If you wish to take advantage of this, please sign and return both copies for us to countersign and date, after which we will return the master copy to yourselves for your records and include the maintenance into our work schedule.

38. The prices cover the routine maintenance of the system, including labour, but do not include the cost of replacement parts or any additional labour in carrying out repair or remedial work. From our experience the systems should not incur large additional repair bills, provided they are maintained regularly.

39. Any work to be carried out outside normal weekday hours or during weekends will be charged at overtime rates. No allowance has been made for waiting time, which may result due to circumstances outside our control.

40. Our standard terms and conditions apply.

41. An emergency breakdown service is available by telephoning 0870 220 8211 during normal working hours. Outside normal working hours this facility may be obtained by telephoning 0844 335 2060 and quoting Global Fire Systems 739. You will then be through to our engineers' paging service where details of your breakdown will be recorded and forwarded to our engineer who will contact you within 30 minutes of receiving the call.