SURVEILLANCE REQUIREMENTS (Continued)

2. Verifying that the ventilation system satisfies the in-place testing acceptance criteria and uses the test procedures of Regulatory Positions C.5.a, C.5.c[2], and C.5.d[2] of Regulatory Guide 1.52, Revision 1, July 1976, and the system flow rate is 156,680 cfm ± 10%.

3. Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 1, July 1976, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 1, July 1976.[3]

4. Verifying a system flow rate of 156,680 cfm ± 10% during system operation when tested in accordance with ANSI N510-1975.

c. After every 720 hours of charcoal adsorber operation by verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b. of Regulatory Guide 1.52, Revision 1, July 1976, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 1, July 1976.[3]

d. At least once per 18 months by verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is <6 inches Water Gauge while operating the system at a flow rate of 156,680 cfm ± 10%.

e. After each complete or partial replacement of a HEPA filter bank by verifying that the HEPA filter banks remove ≥ 99% of the DOP when they are tested in-place in accordance with ANSI N510-1975[2] while operating the system at a flow rate of 39,170 cfm ± 10%.

f. After each complete or partial replacement of a charcoal adsorber bank by verifying that the charcoal adsorbers remove ≥ 99% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with ANSI N510-1975[2] while operating the system at a flow rate of 39,170 cfm ± 10%.

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2 The air flow distribution test, Section 8 of ANSI N510-1975, may be performed downstream of the HEPA filters.

3 The laboratory test of Table 3 for a representative sample of used activated carbon shall be per Test 5b in Table 2 at a relative humidity of 70% for a methyl iodide removal efficiency of ≥ 95%.

PLANT SYSTEMS

3/4.7.8 AUXILIARY BUILDING VENTILATION EXHAUST SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.8.1 The Auxiliary Building ventilation exhaust system shall be OPERABLE and shall consist of a minimum of two independent pairs of exhaust fans and four filter systems.[1]

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With one pair of exhaust fans or one filter system inoperable, restore the inoperable pair of fans or system to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.7.8.1. Each Auxiliary Building ventilation exhaust system shall be demonstrated OPERABLE:

a. At least once per 31 days on a STAGGERED TEST BASIS by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers and verifying that the system operates for at least 15 minutes.

b. At least once per 18 months or (1) after any structural maintenance on the HEPA filters or charcoal adsorber housings; or (2) following painting, fire or chemical release in any ventilation zone communicating with the system by:

1. Verifying that the system operating at a flow rate of 156,680 cfm $\pm$ 10% and exhausting through the HEPA filters and charcoal adsorbers, the total bypass flow of the system to the facility vent, including leakage through the system diverting valves, is $\leq$ 1% when the system is tested by admitting cold DOP at the system intake.

[1] More than one filter system and more than one pair of exhaust fans may be inoperable for up to 12 hours for surveillance testing per Specification 4.7.8.1.b, e, or f.

3/4.7.8 AUXILIARY BUILDING VENTILATION EXHAUST SYSTEM

The OPERABILITY of the Auxiliary Building ventilation exhaust system ensures that suitable ambient conditions for personnel and equipment are maintained for all operating periods and that the effects of post accident contitions in the Auxiliary Building are mitigated. Supply and exhaust duct systems are arranged to direct air from areas of low to higher activity eventually directing it to the main exhaust filter system and from there through the fans to the exhaust vent. The main exhaust filters include roughing, HEPA, and charcoal cells.

3/4.7.9 HYDRAULIC SNUBBERS

The hydraulic snubbers are required OPERABLE to ensure that the structural integrity of the reactor coolant system and all other safety-related systems is maintained during and following a seismic or other event initiating dynamic loads. The only snubbers excluded from this inspection program are those installed on nonsafety-related systems, and then only if their failure or failure of the system on which they are installed would have no adverse effect on any safety-related system.

The inspection frequency applicable to snubbers containing seals fabricated from materials which have been demonstrated compatible with their operating environment is based upon maintaining a constant level of snubber protection. Therefore, the required inspection interval varies inversely with the observed snubber failures. The number of inoperable snubbers found during an inspection of these snubbers determines the time interval for the next required inspection of these snubbers. Inspections performed before that interval has elapsed may be used as a new reference point to determine the next inspection. However, the results of such early inspections performed before the original required time interval has elapsed (nominal time less than 25%) may not be used to lengthen the required inspection interval. Any inspection whose results require a shorter inspection interval will override the previous schedule.

To provide further assurance of snubber reliability, a representative sample of the installed snubbers will be functionally tested during plant shutdowns at 18 month intervals. These tests will include stroking of the snubbers to verify proper piston movement, lock-up and bleed. Observed failures of these sample snubbers will require functional testing of additional units. To minimize personnel exposures, snubbers installed in high radiation zones or in especially difficult to remove locations may be exempted from these functional testing requirements provided the OPERABILITY of these snubbers was demonstrated during functional testing at either the completion of their fabrication or at a subsequent date.

3/4.7.10 SEALED SOURCE CONTAMINATION

The limitations on removable contamination for sources requiring leak testing, including alpha emitters, is based on 10CFR70.39(c) limits for plutonium. This limitation will ensure that leakage from byproduct, source, and special nuclear material sources will not exceed allowable intake values.

3.4.7.11 FIRE SUPPRESSION SYSTEMS

The OPERABILITY of the fire suppression systems ensures that adequate fire suppression capability is available to confine and extinguish fires occurring in any portion of the facility where safety-related equipment is located. The fire suppression system consists of the water system deluge and sprinklers, hose stations, and Halon. The collective capability of the fire suppression systems is adequate to minimize potential damage to safety related equipment and is a major element in the facility fire protection program.

In the event that portions of the fire suppression systems are inoperable, alternate backup fire fighting equipment is required to be made available in the affected areas until the affected equipment can be restored to service.

In the event that the fire suppression water system becomes inoperable, immediate corrective measures must be taken since this system provides the major fire suppression capability of the plant. The requirement for a twenty-four hour report to the Commission provides for prompt evaluation of the acceptability of the corrective measures to provide adequate fire suppression capability for the continued protection of the nuclear plant.

3/4.7.12 PENETRATION FIRE BARRIERS

The functional integrity of the penetration fire barriers ensures that fires will be confined or adequately retarded from spreading to adjacent portions of the facility. This design feature minimizes the possibility of a single fire rapidly involving several areas of the facility prior to detection and extinguishment. The penetration fire barriers are a passive element in the facility fire protection program and are subject to periodic inspection.

During periods of time when the barriers are not functional, a continuous fire watch is required to be maintained in the vicinity of the affected barrier until the barrier is restored to functional status.