

CONTAINMENT SYSTEMS

HYDROGEN PURGE SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.4.2 A containment hydrogen purge system shall be OPERABLE.

APPLICABILITY: MODES 1 and 2.

ACTION:

With the containment hydrogen purge system inoperable, restore the hydrogen purge system to OPERABLE status within 30 days or be in at least HOT STANDBY within the next 6 hours.

SURVEILLANCE REQUIREMENTS

4.6.4.2 The hydrogen purge system shall be demonstrated OPERABLE:

- a. At least once per 31 days 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 filter 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 purge system satisfies the in-place testing acceptance criteria and uses the test procedures of Regulatory Positions C.5.a, C.5.c*, and C.5.d* of Regulatory Guide 1.52, Revision 1, July 1976, and the system at rated flow \pm 10%.**
 2. 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.

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

** The term "rated flow" is defined as the flow with all fans running and with purge valves throttled to maintain compliance with the NRC "Interim Position for Containment Purge and Vent Valve Operation Pending Resolution of Isolation Valve Operability," October 23, 1979.

CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (continued)

3. Verifying the system is at rated flow $\pm 10\%^{**}$ 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.
- 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 at rated flow $\pm 10\%^{**}$.
- e. After each complete or partial replacement of a HEPA filter bank by verifying that the HEPA filter banks remove $\geq 99\%$ of the DOP when they are tested in-place in accordance with ANSI N510-1975* while operating the system at one-half rated flow $\pm 10\%^{**}$.
- f. After each complete or partial replacement of a charcoal adsorber bank by verifying that the charcoal adsorbers remove $\geq 99\%$ of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with ANSI N510-1975* while operating the system at one-half rated flow $\pm 10\%^{**}$.