

ATTACHMENT (1)

UNIT 1
TECHNICAL SPECIFICATIONS
REVISED PAGES

3/4.6 CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

Replace
with
Insert
"A"

3. Verifying within 31 days after removal that a laboratory analysis of a carbon sample removed from one of the charcoal adsorbers demonstrates a removal efficiency of $\geq 95\%$ for radioactive elemental iodine when the sample is tested in accordance with ANSI N510-1975 (130°C, 95% R.H.). The carbon samples not obtained from test canisters shall be prepared by emptying a representative sample from an adsorber test tray section, mixing the adsorbent thoroughly, and obtaining samples at least two inches in diameter and with a length equal to the thickness of the bed. Successive samples will be removed from different test tray sections.

4. Verifying a filter train flow rate of 20,000 cfm $\pm 10\%$ during system operation when tested in accordance with ANSI N510-1975.

c. After every 720 hours of charcoal adsorber operation by:

Replace
with
Insert
"A"

- * Verifying within 31 days after removal that a laboratory analysis of a carbon sample demonstrates a removal efficiency of $\geq 95\%$ for radioactive elemental iodine when the sample is tested in accordance with ANSI N510-1975 (130°C, 95% R.H.). Samples are prepared by emptying a representative sample from an adsorber test tray section, mixing the adsorbent thoroughly, and obtaining samples at least two inches in diameter and with a length equal to the thickness of the bed. Successive samples will be removed from different test tray sections.

Subsequent to reinstalling the adsorber tray used for obtaining the carbon sample, the filter train shall be demonstrated **OPERABLE** by also verifying that the charcoal adsorbers remove $\geq 99\%$ of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52 Revision 2 March 1978 while operating the filter train at a flow rate of 20,000 cfm $\pm 10\%$.

d. At least once per REFUELING INTERVAL by:

1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is < 6 inches Water Gauge while operating the filter train at a flow rate of 20,000 cfm $\pm 10\%$.

3/4.6 CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

2. Verifying that the HEPA filter banks remove $\geq 99\%$ of the DOP when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52 Revision 2 March 1978 while operating the filter train at a flow rate of $2000 \text{ cfm} \pm 10\%$.

Replace
with
Insert
"B"

3. Verifying within 31 days after removal that a laboratory analysis of a carbon sample removed from one of the charcoal adsorbers demonstrates a removal efficiency of $\geq 90\%$ for radioactive methyl iodide when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). The carbon samples not obtained from test canisters shall be prepared by emptying a representative sample from an adsorber test tray section, mixing the adsorbent thoroughly, and obtaining samples at least two inches in diameter and with a length equal to the thickness of the bed. Successive samples will be removed from different test tray sections.

4. Verifying a system flow rate of $2000 \text{ cfm} \pm 10\%$ during system operation when tested in accordance with ANSI N510-1975.

c. After every 720 hours of charcoal adsorber operation by:

Replace
with
Insert
"B"

- ★ Verifying within 31 days after removal that a laboratory analysis of a carbon sample demonstrates a removal efficiency of $\geq 90\%$ for radioactive methyl iodide when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). Samples are prepared by emptying a representative sample from an adsorber test tray section, mixing the adsorbent thoroughly, and obtaining samples at least two inches in diameter and with a length equal to the thickness of the bed. Successive samples will be removed from different test tray sections.

Subsequent to reinstalling the adsorber tray used for obtaining the carbon sample, the filter train shall be demonstrated OPERABLE by verifying that the charcoal adsorbers remove $\geq 99\%$ of the halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52 Revision 2 March 1978 while operating the ventilation system at a flow rate of $2000 \text{ cfm} \pm 10\%$.

3/4.7 PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS

4.7.6.1 The Control Room Emergency Ventilation System shall be demonstrated **OPERABLE**:

- a. At least once per 62 days, on a **STAGGERED TEST BASIS**, by deenergizing the backup Control Room air conditioner and verifying that the emergency Control Room air conditioners maintain the air temperature $\leq 104^{\circ}\text{F}$ for at least 12 hours when in the recirculation mode.
- b. At least once per 31 days by initiation flow through each HEPA filter and charcoal adsorber train and verifying that each train operates for at least 15 minutes.
- c. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housing, or (2) following painting, fire or chemical release in any ventilation zone communicating with the system by:
 1. Verifying that the charcoal adsorbers remove $\geq 99\%$ of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52 Revision 2 March 1978 while operating the ventilation system at a flow rate of $2000 \text{ cfm} \pm 10\%$.
 2. Verifying that the HEPA filter banks remove $\geq 99\%$ of the DOP when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52 Revision 2 March 1978 while operating the ventilation system at a flow rate of $2000 \text{ cfm} \pm 10\%$.
 3. Verifying within 31 days after removal that a laboratory analysis of a carbon sample removed from one of the charcoal adsorbers demonstrates a removal efficiency of $\geq 90\%$ for radioactive methyl iodide when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). The carbon samples not obtained from test canisters shall be prepared by emptying a representative sample from an adsorber test tray section, mixing the adsorbent thoroughly, and obtaining samples at least two inches in diameter and with a length equal to the thickness of the bed. Successive samples will be removed from different test tray sections.

Replace
with
Insert
"B"

3/4.7 PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

4. Verifying a system flow rate of $2000 \text{ cfm} \pm 10\%$ during system operation when tested in accordance with ANSI N510-1975.

- d. After every 720 hours of charcoal adsorber operation by:

Replace
with
Insert
"B"

Verifying within 31 days after removal that a laboratory analysis of a carbon sample demonstrates a removal efficiency of $\geq 90\%$ for radioactive methyl iodide when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). Samples are prepared by emptying a representative sample from an adsorber test tray section, mixing the adsorbent thoroughly, and obtaining samples at least two inches in diameter and with a length equal to the thickness of the bed. Successive samples will be removed from different test tray sections.

Subsequent to reinstalling the adsorber tray used for obtaining the carbon sample, the filter train shall be demonstrated **OPERABLE** by also verifying that the charcoal adsorbers remove $\geq 99\%$ of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52 Revision 2 March 1978 while operating the ventilation system at a flow of $2000 \text{ cfm} \pm 10\%$.

- e. At least once per 18 months by:

1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is < 4 inches Water Gauge while operating the ventilation system at a flow rate of $2000 \text{ cfm} \pm 10\%$.
2. Verifying that on a Control Room high radiation test signal, the system automatically switches into a recirculation mode of operation with flow through the HEPA filters and charcoal adsorber banks and that both of the isolation valves in each inlet duct and common exhaust duct, and the isolation valve in the toilet area exhaust duct, close.

3/4.7 PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

2. Verifying that the HEPA filter banks remove $\geq 99\%$ of the DOP when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52 Revision 2 March 1978 while operating the filter train at a flow rate of $3000 \text{ cfm} \pm 10\%$.

Replace
with
Insert
"B"

3. Verifying within 31 days after removal that a laboratory analysis of a carbon sample removed from one of the charcoal adsorbers demonstrates a removal efficiency of $\geq 90\%$ for radioactive methyl iodide when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). The carbon samples not obtained from test canisters shall be prepared by emptying a representative sample from an adsorber test tray section, mixing the adsorbent thoroughly, and obtaining samples at least two inches in diameter and with a length equal to the thickness of the bed. Successive samples will be removed from different test tray sections.

4. Verifying a system flow rate of $3000 \text{ cfm} \pm 10\%$ during system operation when tested in accordance with ANSI N510-1975.

c. After every 720 hours of charcoal adsorber operation by:

Replace
with
Insert
"B"

- Verifying within 31 days after removal that a laboratory analysis of a carbon sample demonstrates a removal efficiency of $\geq 90\%$ for radioactive methyl iodide when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). Samples are prepared by emptying a representative sample from an adsorber test tray section, mixing the adsorbent thoroughly, and obtaining samples at least two inches in diameter and with a length equal to the thickness of the bed. Successive samples will be removed from different test tray sections.

Subsequent to reinstalling the adsorber tray used for obtaining the carbon sample, the filter train shall be demonstrated **OPERABLE** by also verifying that the charcoal adsorbers remove $\geq 99\%$ of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52 Revision 2 March 1978 while operating the ventilation system at a flow rate of $3000 \text{ cfm} \pm 10\%$.

- d. At least once per 18 months by verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is < 4 inches Water Gauge while operating the filter train at a flow rate of $3000 \text{ cfm} \pm 10\%$.

3/4.9 REFUELING OPERATIONS

SURVEILLANCE REQUIREMENTS (Continued)

- b. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housing, or (2) following painting, fire or chemical release in any ventilation zone communicating with the system by:
1. Verifying that the charcoal adsorbers remove $\geq 99\%$ of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52 Revision 2 March 1978 while operating the ventilation system at a flow rate of $32,000 \text{ cfm} \pm 10\%$.
 2. Verifying that the HEPA filter banks remove $\geq 99\%$ of the DOP when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52 Revision 2 March 1978 while operating the ventilation system at a flow rate of $32,000 \text{ cfm} \pm 10\%$.
 3. Verifying within 31 days after removal that a laboratory analysis of a carbon sample removed from one of the charcoal adsorbers demonstrates a removal efficiency of $\geq 90\%$ for radioactive methyl iodide when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). The carbon samples not obtained from test canisters shall be prepared by emptying a representative sample from an adsorber test tray section, mixing the adsorbent thoroughly, and obtaining samples at least two inches in diameter and with a length equal to the thickness of the bed. Successive samples will be removed from different test tray sections.
 4. Verifying a system flow rate of $32,000 \text{ cfm} \pm 10\%$ during system operation when tested in accordance with ANSI N510-1975.
- c. After every 720 hours of charcoal adsorber operation by:

Replace
with
Insert
"B"

Replace
with
Insert
"B"

Verifying within 31 days after removal that a laboratory analysis of carbon sample demonstrates a removal efficiency of $\geq 90\%$ for radioactive methyl iodide when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). Samples are prepared by emptying a representative sample from an adsorber test tray section, mixing the adsorbent thoroughly, and obtaining samples at least two inches in diameter and with a length equal to the thickness of the bed. Successive samples will be removed from different test tray sections.

INSERT A

Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained from an adsorber tray or from an adsorber test tray in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of $\geq 95\%$ for radioactive elemental iodine when the sample is tested in accordance with ANSI N510-1975 (130 °C, 95% R.H.).

INSERT B

Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained from an adsorber tray or from an adsorber test tray in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of $\geq 90\%$ for radioactive methyl iodine when the sample is tested in accordance with ANSI N510-1975 (30 °C, 95% R.H.).

ATTACHMENT (2)

UNIT 2

TECHNICAL SPECIFICATIONS

REVISED PAGES

3/4.6 CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

Replace
with
Insert
"A"

3. Verifying within 31 days after removal that a laboratory analysis of a carbon sample removed from one of the charcoal adsorbers demonstrates a removal efficiency of $\geq 95\%$ for radioactive elemental iodine when the sample is tested in accordance with ANSI N510-1975 (130°C, 95% R.H.). The carbon samples not obtained from test canisters shall be prepared by emptying a representative sample from an adsorber test tray section, mixing the adsorbent thoroughly, and obtaining samples at least two inches in diameter and with a length equal to the thickness of the bed. Successive samples will be removed from different test tray sections.

4. Verifying a filter train flow rate of 20,000 cfm $\pm 10\%$ during system operation when tested in accordance with ANSI N510-1975.

- c. After every 720 hours of charcoal adsorber operation by:

Replace
with
Insert
"A"

- Verifying within 31 days after removal that a laboratory analysis of a carbon sample demonstrates a removal efficiency of $\geq 93\%$ for radioactive elemental iodine when the sample is tested in accordance with ANSI N510-1975 (130°C, 95% R.H.). Samples are prepared by emptying a representative sample from an adsorber test tray section, mixing the adsorbent thoroughly, and obtaining samples at least two inches in diameter and with a length equal to the thickness of the bed. Successive samples will be removed from different test tray sections.

Subsequent to reinstalling the adsorber tray used for obtaining the carbon sample, the filter train shall be demonstrated **OPERABLE** by also verifying that the charcoal adsorbers remove $\geq 99\%$ of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52 Revision 2 March 1978 while operating the filter train at a flow rate of 20,000 cfm $\pm 10\%$.

3/4.6 CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

2. Verifying that the HEPA filter banks remove $\geq 99\%$ of the DOP when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52 Revision 2 March 1978 while operating the filter train at a flow rate of $2000 \text{ cfm} \pm 10\%$.

Replace
with
Insert
"B"

3. Verifying within 31 days after removal that a laboratory analysis of a carbon sample removed from one of the charcoal adsorbers demonstrates a removal efficiency of $\geq 90\%$ for radioactive methyl iodide when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). The carbon samples not obtained from test canisters shall be prepared by emptying a representative sample from an adsorber test tray section, mixing the adsorbent thoroughly, and obtaining samples at least two inches in diameter and with a length equal to the thickness of the bed. Successive samples will be removed from different test tray sections.

4. Verifying a system flow rate of $2000 \text{ cfm} \pm 10\%$ during system operation when tested in accordance with ANSI N510-1975.

c. After every 720 hours of charcoal adsorber operation by:

Replace
with
Insert
"B"

- Verifying within 31 days after removal that a laboratory analysis of a carbon sample demonstrates a removal efficiency of $\geq 90\%$ for radioactive methyl iodide when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). Samples are prepared by emptying a representative sample from an adsorber test tray section, mixing the adsorbent thoroughly, and obtaining samples at least two inches in diameter and with a length equal to the thickness of the bed. Successive samples will be removed from different test tray sections.

3/4.7 PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS

4.7.6.1 The Control Room Emergency Ventilation System shall be demonstrated **OPERABLE**:

- a. At least once per 62 days, on a **STAGGERED TEST BASIS**, by deenergizing the backup Control Room air conditioner and verifying that the emergency Control Room air conditioners maintain the air temperature $\leq 104^{\circ}\text{F}$ for at least 12 hours when in the recirculation mode.
- b. At least once per 31 days by initiation flow through each HEPA filter and charcoal adsorber train and verifying that each train operates for at least 15 minutes.
- c. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housing, or (2) following painting, fire or chemical release in any ventilation zone communicating with the system by:
 1. Verifying that the charcoal adsorbers remove $\geq 99\%$ of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52 Revision 2 March 1978 while operating the ventilation system at a flow rate of $2000 \text{ cfm} \pm 10\%$.
 2. Verifying that the HEPA filter banks remove $\geq 99\%$ of the DOP when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52 Revision 2 March 1978 while operating the ventilation system at a flow rate of $2000 \text{ cfm} \pm 10\%$.
 3. Verifying within 31 days after removal that a laboratory analysis of a carbon sample removed from one of the charcoal adsorbers demonstrates a removal efficiency of $\geq 90\%$ for radioactive methyl iodide when the sample is tested in accordance with ANSI N510-1975 (30°C , 95% R.H.). The carbon samples not obtained from test canisters shall be prepared by emptying a representative sample from an adsorber test tray section, mixing the adsorbent thoroughly, and obtaining samples at least two inches in diameter and with a length equal to the thickness of the bed. Successive samples will be removed from different test tray sections.

Replace
with
Insert
"B"

3/4.7 PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

4. Verifying a system flow rate of 2000 cfm \pm 10% during system operation when tested in accordance with ANSI N510-1975.

- d. After every 720 hours of charcoal adsorber operation by:

Replace
with
Insert
"B"

Verifying within 31 days after removal that a laboratory analysis of a carbon sample demonstrates a removal efficiency of \geq 90% for radioactive methyl iodide when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). Samples are prepared by emptying a representative sample from an adsorber test tray section, mixing the adsorbent thoroughly, and obtaining samples at least two inches in diameter and with a length equal to the thickness of the bed. Successive samples will be removed from different test tray sections.

Subsequent to reinstalling the adsorber tray used for obtaining the carbon sample, the filter train shall be demonstrated **OPERABLE** by also verifying that the charcoal adsorbers remove \geq 99% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52 Revision 2 March 1978 while operating the ventilation system at a flow of 2000 cfm \pm 10%.

- e. At least once per 18 months by:

1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is $<$ 4 inches Water Gauge while operating the ventilation system at a flow rate of 2000 cfm \pm 10%.
2. Verifying that on a control room high radiation test signal, the system automatically switches into a recirculation mode of operation with flow through the HEPA filters and charcoal adsorber banks and that both of the isolation valves in each inlet duct and common exhaust duct, and the isolation valve in the toilet area exhaust duct, close.

3/4.7 PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

2. Verifying that the HEPA filter banks remove $\geq 99\%$ of the DOP when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52 Revision 2 March 1978 while operating the filter train at a flow rate of 3000 cfm $\pm 10\%$.

Replace
With
Insert
"B"

3. Verifying within 31 days after removal that a laboratory analysis of a carbon sample removed from one of the charcoal adsorbers demonstrates a removal efficiency of $\geq 90\%$ for radioactive methyl iodide when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). The carbon samples not obtained from test canisters shall be prepared by emptying a representative sample from an adsorber test tray section, mixing the adsorbent thoroughly, and obtaining samples at least two inches in diameter and with a length equal to the thickness of the bed. Successive samples will be removed from different test tray sections.

4. Verifying a system flow rate of 3000 cfm $\pm 10\%$ during system operation when tested in accordance with ANSI N510-1975.

- c. After every 720 hours of charcoal adsorber operation by:

Replace
With
Insert
"B"

Verifying within 31 days after removal that a laboratory analysis of a carbon sample demonstrates a removal efficiency of $\geq 90\%$ for radioactive methyl iodide when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). Samples are prepared by emptying a representative sample from an adsorber test tray section, mixing the adsorbent thoroughly, and obtaining samples at least two inches in diameter and with a length equal to the thickness of the bed. Successive samples will be removed from different test tray sections.

Subsequent to reinstalling the adsorber tray used for obtaining the carbon sample, the filter train shall be demonstrated **OPERABLE** by also verifying that the charcoal adsorbers remove $\geq 99\%$ of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52 Revision 2 March 1978 while operating the ventilation system at a flow rate of 3000 cfm $\pm 10\%$.

- d. At least once per 18 months by verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is < 4 inches Water Gauge while operating the filter train at a flow rate of 3000 cfm $\pm 10\%$.

3/4.9 REFUELING OPERATIONS

SURVEILLANCE REQUIREMENTS (Continued)

- b. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housing, or (2) following painting, fire or chemical release in any ventilation zone communicating with the system by:
1. Verifying that the charcoal adsorbers remove $\geq 99\%$ of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52 Revision 2 March 1978 while operating the ventilation system at a flow rate of $32,000 \text{ cfm} \pm 10\%$.
 2. Verifying that the HEPA filter banks remove $\geq 99\%$ of the DCP when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52 Revision 2 March 1978 while operating the ventilation system at a flow rate of $32,000 \text{ cfm} \pm 10\%$.
 3. Verifying within 31 days after removal that a laboratory analysis of a carbon sample removed from one of the charcoal adsorbers demonstrates a removal efficiency of $\geq 90\%$ for radioactive methyl iodide when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). The carbon samples not obtained from test canisters shall be prepared by emptying a representative sample from an adsorber test tray section, mixing the adsorbent thoroughly, and obtaining samples at least two inches in diameter and with a length equal to the thickness of the bed. Successive samples will be removed from different test tray sections.
 4. Verifying a system flow rate of $32,000 \text{ cfm} \pm 10\%$ during system operation when tested in accordance with ANSI N510-1975.

Replace
with
Insert
"B"

3/4.9 REFUELING OPERATIONS

SURVEILLANCE REQUIREMENTS (Continued)

- c. After every 720 hours of charcoal adsorber operation by:

Replace
with
Insert
"B"

Verifying within 31 days after removal that a laboratory analysis of carbon sample demonstrates a removal efficiency of $\geq 90\%$ for radioactive methyl iodide when the sample is tested in accordance with ANSI N510-1975 (30°C, 95% R.H.). Samples are prepared by emptying a representative sample from an adsorber test tray section, mixing the adsorbent thoroughly, and obtaining samples at least two inches in diameter and with a length equal to the thickness of the bed. Successive samples will be removed from different test tray sections.

Subsequent to reinstalling the adsorber tray used for obtaining the carbon sample, the filter train shall be demonstrated OPERABLE by also verifying that the charcoal adsorbers remove $\geq 99\%$ of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Regulatory Positions C.5.a and C.5.d of Regulatory Guide 1.52 Revision 2 March 1978 while operating the ventilation system at a flow rate of 32,000 cfm $\pm 10\%$.

- d. At least once per 18 months by:

1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is < 4 inches Water Gauge while operating the ventilation system at a flow rate of 32,000 cfm $\pm 10\%$.
2. Verifying that each exhaust fan maintains the spent fuel storage pool area at a measurable negative pressure relative to the outside atmosphere during system operation.

- 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 Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52 Revision 2 March 1978 while operating the ventilation system at a flow rate of 32,000 cfm $\pm 10\%$.

INSERT A

Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained from an adsorber tray or from an adsorber test tray in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of $\geq 95\%$ for radioactive elemental iodine when the sample is tested in accordance with ANSI N510-1975 (130° C, 95% R.H.).

INSERT B

Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained from an adsorber tray or from an adsorber test tray in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, demonstrates a removal efficiency of $\geq 90\%$ for radioactive methyl iodine when the sample is tested in accordance with ANSI N510-1975 (30° C, 95% R.H.).