

## CONTAINMENT SYSTEMS

### HYDROGEN PURGE SYSTEM

#### LIMITING CONDITION FOR OPERATION

3.6.4.4 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

4.6.4.4 The hydrogen purge system shall be demonstrated OPERABLE:

- a. At least once per 18 months by initiating flow through the HEPA filters and charcoal adsorbers and verifying that the system operates for at least 10 hours with the heaters on.
- 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 cleanup system satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 1% and uses the test procedure guidance in Regulatory Positions C.5.a, C.5.c and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, and the system flow rate is 100 cfm  $\pm$  10%; and
  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 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a\* of Regulatory Guide 1.52, Revision 2, March 1978, for a methyl iodide penetration of less than 1%.

\* See attached INSERT

## CONTAINMENT SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

- 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 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a\* of Regulatory Guide 1.52, Revision 2, March 1978, for a methyl iodide penetration of less than 1%.
- d. At least once per 18 months by:
  - 1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is less than 25 inches Water Gauge while operating the system at a flow rate of  $100 \text{ cfm} \pm 10\%$ ; and
  - 2. Verifying that the heaters dissipate  $2.0 \pm 0.4 \text{ kw}$  when tested in accordance with ANSI N510-1980.
- e. After each complete or partial replacement of a HEPA filter bank, by verifying that the cleanup system satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 1% in accordance with ANSI N510-1980 for a DOP test aerosol while operating the system at a flow rate of  $100 \text{ cfm} \pm 10\%$ .
- f. After each complete or partial replacement of a charcoal adsorber bank, by verifying that the cleanup system satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 1% in accordance with ANSI N510-1980 for a halogenated hydrocarbon refrigerant test gas while operating the system at a flow rate of  $100 \text{ cfm} \pm 10\%$ .

\* See attached INSERT

# INFORMATION ONLY

## CONTAINMENT SYSTEMS

### 3/4.6.5 SHIELD BUILDING

#### EMERGENCY VENTILATION SYSTEM

#### LIMITING CONDITION FOR OPERATION

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3.6.5.1 Two independent emergency ventilation systems shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With one emergency ventilation system inoperable, restore the inoperable 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

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4.6.5.1 Each emergency ventilation 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 filter or charcoal adsorber housings, or (2) following painting, fire or chemical release in any ventilation zone communicating with the system by:

## CONTAINMENT SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

1. Verifying that the cleanup system satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 1% and uses the test procedure guidance in Regulatory Positions C.5.a, C.5.c and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, and the system flow rate is 8,000 cfm  $\pm$  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 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a\* of Regulatory Guide 1.52, Revision 2, March 1978, for a methyl iodide penetration of less than 1%; and
  3. Verifying a system flow rate of 8,000 cfm  $\pm$  10% during system operation when tested in accordance with ANSI N510-1980.
- 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 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a\* of Regulatory Guide 1.52, Revision 2, March 1978, for a methyl iodide penetration of less than 1%.
- d. At least once per 18 months by:
1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is less than 6 inches Water Gauge while operating the system at a flow rate of 8,000 cfm  $\pm$  10%;
  2. Verifying that the system starts automatically on any containment isolation test signal;
  3. Verifying that the filter cooling bypass valves can be manually opened; and

\* See attached INSERT

# INFORMATION ONLY

## CONTAINMENT SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

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4. Verifying that each system produces a negative pressure of greater than or equal to 0.25 inches Water Gauge in the annulus within 4 seconds after the fan attains a flow rate of 8000 cfm  $\pm$  10%. This test is to be performed with the flow path established prior to starting the EVS fan, and the other dampers associated with the negative pressure boundary closed.
- e. After each complete or partial replacement of a HEPA filter bank, by verifying that the cleanup system satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 1% in accordance with ANSI N510-1980 for a DOP test aerosol while operating the system at a flow rate of 8000 cfm  $\pm$  10%.
- f. After each complete or partial replacement of a charcoal adsorber bank, by verifying that the cleanup system satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 1% in accordance with ANSI N510-1980 for a halogenated hydrocarbon refrigerant test gas while operating the system at a flow rate of 8000 cfm  $\pm$  10%.

# INFORMATION ONLY

## PLANT SYSTEMS

### 3/4.7.6 CONTROL ROOM EMERGENCY VENTILATION SYSTEM

#### LIMITING CONDITION FOR OPERATION

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3.7.6.1 Two independent control room emergency ventilation systems shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With one control room emergency ventilation system inoperable, restore the inoperable 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

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4.7.6.1 Each control room emergency ventilation system shall be demonstrated OPERABLE:

- a. At least once per 12 hours by verifying that the control room air temperature is less than or equal to 110°F when the control room emergency ventilation system is operating.
- b. 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.
- c. 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:

## PLANT SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

1. Verifying that the cleanup system satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 1% and uses the test procedure guidance in Regulatory Positions C.5.a, C.5.c and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, and the system flow rate is 3300 cfm  $\pm$  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 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a\* of Regulatory Guide 1.52, Revision 2, March 1978, for a methyl iodide penetration of less than 1%; and
3. Verifying a system flow rate of 3300 cfm  $\pm$  10% during system operation when tested in accordance with ANSI N510-1980.
- d. 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 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a\* of Regulatory Guide 1.52, Revision 2, March 1978, for a methyl iodide penetration of less than 1%.
- e. At least once per 18 months by:
  1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is less than 4.4 inches Water Gauge while operating the system at a flow rate of 3300 cfm  $\pm$  10%;
  2. Verifying that the control room normal ventilation system is isolated by a SFAS test signal and a Station Vent Radiation High test signal; and

\* See attached INSERT



# INFORMATION ONLY

## PLANT SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

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3. Verifying that the makeup flow of the system is  $300 \text{ cfm} \pm 10\%$  when supplying the control room with outside air.
- f. After each complete or partial replacement of a HEPA filter bank, by verifying that the cleanup system satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 1% in accordance with ANSI N510-1980 for a DOP test aerosol while operating the system at a flow rate of  $3300 \text{ cfm} \pm 10\%$ .
- g. After each complete or partial replacement of a charcoal adsorber bank, by verifying that the cleanup system satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 1% in accordance with ANSI N510-1980 for a halogenated hydrocarbon refrigerant test gas while operating the system at a flow rate of  $3300 \text{ cfm} \pm 10\%$ .



INSERT Footnote SR 4.6.4.4.b.2  
SR 4.6.4.4.c  
SR 4.6.5.1.b.2  
SR 4.6.5.1.c  
SR 4.7.6.1.c.2  
SR 4.7.6.1.d :

\* The test is performed in accordance with ASTM D 3803-1979  
with the following conditions:

- 1) Equilibrate for 16 hours at 30°C and 70% relative humidity
- 2) Challenge for 2 hours at 30°C and 70% relative humidity
- 3) Elution for 2 hours at 30°C and 70% relative humidity

## ENVIRONMENTAL ASSESSMENT

### Identification of Proposed Action

This proposed action involves the Davis-Besse Nuclear Power Station (DBNPS), Unit Number 1, Operating License Number NPF-3, Appendix A, Technical Specifications (TS). A license amendment application is proposed to revise TS 3/4.6.4.4, "Hydrogen Purge System, 3/4.6.5 - Shield Building Emergency Ventilation System, and 3/4.7.6, "Control Room Emergency Ventilation System to reference the current charcoal filter laboratory testing methodology. The test is in accordance with ASTM D 3803-1979 with the following conditions:

1. Equilibrate for 16 hours at 30°C and 70% relative humidity
2. Challenge for 2 hours at 30°C and 70% relative humidity
3. Elution for 2 hours at 30°C and 70% relative humidity

### Need for the Proposed Action

The changes proposed are needed to allow continued plant operation. A plant shutdown would be required due to the inability to perform the surveillance tests literally required by the TS in the time available.

### Environmental Impact of the Proposed Action

The proposed license amendment involves a change to a requirement with respect to the use of facility components located within the restricted area as defined in 10CFR Part 20. As discussed in the Significant Hazards Consideration, this proposed license amendment does not involve a significant hazards consideration. The proposed changes to allow continued plant operation do not alter source terms, containment isolation or allowable releases. In addition, the proposed changes do not involve an increase in the amounts, and no change in the types, of any radiological effluents that may be allowed to be released offsite. Furthermore, there is no increase in the individual or cumulative occupational radiation exposure.

With regard to potential non-radiological impacts, the proposed license amendment involves no increase in the amounts or change in types of any non-radiological effluents that may be released offsite, and has no other environmental impact.

Based on the above, Toledo Edison concludes that there are no significant radiological or non-radiological environmental impacts associated with the proposed license amendment.

#### Alternatives to the Proposed Action

Since Toledo Edison has concluded that the environmental effects of the proposed action are not significant, any alternatives will have only similar or greater environmental impacts. The principal alternative would be not to grant the license amendment. This would not reduce the environmental impacts attributable to the facility. Furthermore, it would force a shutdown of the facility in accordance with TS 3.0.3 upon expiration of the allowed outage time of TS Action Statement 4.0.3 as applied to TS 3.6.5.1 and TS 3.7.6.1.

#### Alternative Use of Resources

This action does not involve the use of resources not previously considered in the Final Environmental Statement Related to the Operation of the Davis-Besse Nuclear Power Station, Unit Number 1 (NUREG 75/097).

#### Finding of No Significant Impact

Toledo Edison has reviewed the proposed license amendment against the criteria of 10CFR51.30 for an environmental assessment. As demonstrated above, the proposed license amendment does not involve a significant hazards consideration, does not increase the types or amounts of effluents that may be released offsite, and does not increase individual or cumulative occupational radiation exposures. Accordingly, Toledo Edison finds that the proposed license amendment, if approved by the Nuclear Regulatory Commission, will have no significant impact on the environment and that no Environmental Impact Statement is required.