

### **5.7.2.1 Material of Construction**

The cover and its closure devices shall be made of suitable materials that will minimize exposure of hazardous waste to the atmosphere, to the extent practical, and will maintain integrity of

the cover and closure devices throughout their intended service life. The factors to be considered when selecting the materials of construction and designing the cover and closed devices shall include: Organic vapor permeability; the effects of any contact with the liquid or its vapors managed in the surface impoundment; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the surface impoundment on which the cover is installed.

The closed-vent system and control device shall be designed and operated to comply with the Subpart CC Standards for Closed-vent systems and control devices. The standards require that closed-vent system shall route gases, vapors, and fumes emitted from the hazardous waste in the unit to a control device. The control device can be one of the following three: (1) Designed and operated to reduce the total organic content of the inlet vapor stream vented to the control device by at least 95 percent by weight; (2) An enclosed combustion device designed and operated to reduce the organic emissions vented to it by 95 weight percent or greater; to achieve a total organic compound concentration of 20 ppmv; or (3) A flare designed and operated with no visible emissions (as determined by [Method 22](#) in 40 CFR part 60) except for periods not to exceed a total of 5 minutes any 2 consecutive hours.

The closed vent system shall be designed and operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background (as determined by [Method 21](#)), and by visual inspection. Alternatively, the closed-vent system can be designed and operated at a pressure below atmospheric pressure. The system shall be equipped with at least one pressure gauge or other pressure measurement device that can be read from a readily accessible location. The pressure measurement must verify that negative pressure is being maintained in the closed-vent system when the control device is operating.

Whenever hazardous waste is in the surface impoundment, the cover shall be installed with each closure device secured in the closed position and the vapor headspace underneath the cover vented to the control device. Venting to the control device is not required, and opening of closure devices or removal of the cover is allowed to provide access to the surface impoundment for performing routine maintenance, or other activities need for normal operations or to remove accumulated sludge or other residues from the bottom of the surface impoundment.

## RCRA SUBPARTS AA, BB AND CC REGULATIONS BODY OF KNOWLEDGE

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The safety device may be opened at any time conditions require doing so to avoid unsafe conditions.

The floating membrane or the cover and its closure devices are inspected through visual inspection to check for defects.

*Defects* include but are not limited to visible cracks, holes, or gaps in the cover section seams or between the interface of the cover edge and its foundation mountings; broken cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.