through a closed-vent system to a control device in accordance with the following requirements:

- (1) The cover and its closure devices shall be designed to form a continuous barrier over the entire surface area of the liquid in the surface impoundment.
- (2) Each opening in the cover not vented to the control device shall be equipped with a closure device. If the pressure in the vapor headspace underneath the cover is less than atmospheric pressure when the control device is operating, the closure devices shall be designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the cover opening and the closure device. If the pressure in the vapor headspace underneath the cover is equal to or greater than atmospheric pressure when the control device is operating, the closure device shall be designed to operate with no detectable organic emissions using the procedure specified in §63.945(a) of this subpart.
- (3) The cover and its closure devices shall be made of suitable materials that will minimize exposure of the regulated-material to the atmosphere, to the extent practical, and will maintain integrity of the equipment throughout its intended service life. Factors to be considered when selecting the materials for and designing the cover and closure 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.
- (4) The closed-vent system and control device shall be designed and operated in accordance with the requirements of §63.693 in 40 CFR part 63, subpart DD—National Emission Standards for Hazardous Air Pollutant Standards from Off-Site Waste and Recovery Operations.
- (c) Whenever a regulated-material 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 except as follows:

- (1) Venting to the control device is not required, and opening of closure devices or removal of the cover is allowed at the following times:
- (i) To provide access to the surface impoundment for performing routine inspection, maintenance, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a port to sample liquid in the surface impoundment, or when a worker needs to open a hatch to maintain or repair equipment. Following completion of the activity, the owner or operator shall promptly secure the closure device in the closed position or reinstall the cover, as applicable, to the surface impoundment.
- (ii) To remove accumulated sludge or other residues from the bottom of surface impoundment.
- (2) Opening of a safety device, as defined in §63.941 of this subpart, is allowed at any time conditions require it to do so to avoid an unsafe condition.
- (d) The owner or operator shall inspect and monitor the air emission control equipment in accordance with the procedures specified in §63.946(b) of this subpart.

## §63.944 [Reserved]

## $\S 63.945$ Test methods and procedures.

- (a) Procedure for determining no detectable organic emissions for the purpose of complying with this subpart.
- (1) The test shall be conducted in accordance with the procedures specified in Method 21 of 40 CFR part 60, appendix A. Each potential leak interface (i.e., a location where organic vapor leakage could occur) on the cover and associated closure devices shall be checked. Potential leak interfaces that are associated with covers and closure devices include, but are not limited to the interface of the cover and its foundation mounting; the periphery of any opening on the cover and its associated closure device; and the sealing seat interface on a spring-loaded pressurerelief valve.
- (2) The test shall be performed when the unit contains a material having a

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total organic concentration representative of the range of concentrations for the materials expected to be managed in the unit. During the test, the cover and closure devices shall be secured in the closed position.

- (3) The detection instrument shall meet the performance criteria of Method 21 of 40 CFR part 60, appendix A, except the instrument response factor criteria in section 3.1.2(a) of Method 21 shall be for the average composition of the organic constituents in the material placed in the unit, not for each individual organic constituent.
- (4) The detection instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR part 60, appendix A.
- (5) Calibration gases shall be as follows:
- (i) Zero air (less than 10 ppmv hydrocarbon in air); and
- (ii) A mixture of methane or nhexane in air at a concentration of approximately, but less than 10,000 ppmv.
- (6) An owner or operator may choose to adjust or not adjust the detection instrument readings to account for the background organic concentration level. If an owner or operator chooses to adjust the instrument readings for the background level, the background level value must be determined according to the procedures in Method 21 of 40 CFR part 60, appendix A.
- (7) Each potential leak interface shall be checked by traversing the instrument probe around the potential leak interface as close to the interface as possible, as described in Method 21. In the case when the configuration of the cover or closure device prevents a complete traverse of the interface, all accessible portions of the interface shall be sampled. In the case when the configuration of the closure device prevents any sampling at the interface and the device is equipped with an enclosed extension or horn (e.g., some pressure relief devices), the instrument probe inlet shall be placed at approximately the center of the exhaust area to the atmosphere.
- (8) An owner or operator must determine if a potential leak interface operates with no detectable emissions using the applicable procedure specified in

paragraph (a)(8)(i) or (a)(8)(ii) of this section.

- (i) If an owner or operator chooses not to adjust the detection instrument readings for the background organic concentration level, then the maximum organic concentration value measured by the detection instrument is compared directly to the applicable value for the potential leak interface as specified in paragraph (a)(9) of this section.
- (ii) If an owner or operator chooses to adjust the detection instrument readings for the background organic concentration level, the value of the arithmetic difference between the maximum organic concentration value measured by the instrument and the background organic concentration value as determined in paragraph (a)(6) of this section is compared with the applicable value for the potential leak interface as specified in paragraph (a)(9) of this section.
- (9) A potential leak interface is determined to operate with no detectable emissions using the applicable criteria specified in paragraphs (a)(9)(i) and (a)(9)(ii) of this section.
- (i) For a potential leak interface other than a seal around a shaft that passes through a cover opening, the potential leak interface is determined to operate with no detectable organic emissions if the organic concentration value determined in paragraph (a)(8) is less than 500 ppmv.
- (ii) For a seal around a shaft that passes through a cover opening, the potential leak interface is determined to operate with no detectable organic emissions if the organic concentration value determined in paragraph (a)(8) is less than 10,000 ppmv.
  - (b) [Reserved]

 $[64~{\rm FR}~38988,~{\rm July}~20,~1999]$ 

## §63.946 Inspection and monitoring requirements.

- (a) Owners and operators that use a surface impoundment equipped with a floating membrane cover in accordance with the provisions of §63.942 of this subpart shall meet the following requirements:
- (1) The floating membrane cover and its closure devices shall be visually inspected by the owner or operator to