4.2.2 Compressors (264.1053 and 265.1053)

Each compressor subject to Subpart BB regulations must be equipped with a seal system that includes a barrier fluid system that prevents leakage of total organic emissions to the atmosphere. The compressor seal system must meet one of three alternatives; (1) The seal system is operated with the barrier fluid at a pressure that is at all times greater than the compressor stuffing box pressure; (2) the seal system is equipped with a barrier fluid system that is connected by a closed-vent system to a control device; or (3) the seal system purges the barrier fluid into a hazardous waste stream with no detectable emissions to the atmosphere. Regardless of which alternative is used to meet the requirements of these standards, the barrier fluid must not be hazardous waste with organic concentrations 10 percent or greater by weight. Also, each barrier fluid system must be equipped with a sensor that will detect failure of the seal system or the barrier fluid system. Each sensor must be checked daily unless it is equipped with an audible alarm which then requires monthly checks to ensure it is functioning properly.

The owner or operator must determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system or the barrier fluid system. If the sensor indicates failure of seal system or the barrier fluid system a leak is detected.

When a leak is detected, it must be repaired as soon as practicable, but no later than 15 calendar days after it is detected. A first attempt must be made no later than five calendar days after each leak is detected.

Compressors which are equipped with a closed-vent system capable of capturing and transporting leakage from the seal to a control device that complies with the requirements of 40 CFR Section 265.1060 are exempt from the seal system requirement.

A compressor is exempt from the above listed requirements if it is equipped with a closed-vent system capable of capturing and transporting any leakage from the seal to a control device that complies with the control device requirements of 40 CFR 264.1060 and 265.1060