



Ohio Administrative Code

Rule 3745-51-753 Compressors - equipment leaks.

Effective: June 12, 2023

(A) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of total organic emissions to the atmosphere, except as provided in paragraphs (H) and (I) of this rule.

(B) Each compressor seal system as required in paragraph (A) of this rule shall be:

(1) Operated with the barrier fluid at a pressure that is at all times greater than the compressor stuffing box pressure; or

(2) Equipped with a barrier fluid system that is connected by a closed-vent system to a control device that complies with the requirements of rule 3745-51-760 of the Administrative Code; or

(3) Equipped with a system that purges the barrier fluid into a hazardous secondary material stream with no detectable emissions to atmosphere.

(C) The barrier fluid shall not be a hazardous secondary material with organic concentrations ten per cent or greater by weight.

(D) Each barrier fluid system as described in paragraphs (A) to (C) of this rule shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.

(E)

(1) Each sensor as required in paragraph (D) of this rule shall be checked daily or shall be equipped with an audible alarm that shall be checked monthly to ensure that the sensor is functioning properly unless the compressor is located within the boundary of an unmanned plant site, in which case the sensor shall be checked daily.



(2) The remanufacturer or other person who stores or treats the hazardous secondary material shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

(F) If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined under paragraph (E)(2) of this rule, a leak is detected.

(G)

(1) When a leak is detected, the leak shall be repaired as soon as practicable, but not later than fifteen calendar days after the leak is detected, except as provided in rule 3745-51-759 of the Administrative Code.

(2) A first attempt at repair (e.g., tightening the packing gland) shall be made no later than five calendar days after each leak is detected.

(H) A compressor is exempt from the requirements of paragraphs (A) and (B) of this rule if the compressor 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 requirements of rule 3745-51-760 of the Administrative Code, except as provided in paragraph (I) of this rule.

(I) Any compressor that is designated, as described in paragraph (G)(2) of rule 3745-51-764 of the Administrative Code, for no detectable emissions as indicated by an instrument reading of less than five hundred ppm above background is exempt from the requirements of paragraphs (A) to (H) of this rule if the compressor:

(1) Is determined to be operating with no detectable emissions, as indicated by an instrument reading of less than five hundred ppm above background, as measured by the method specified in paragraph (C) of rule 3745-51-763 of the Administrative Code.

(2) Is tested for compliance with paragraph (I)(1) of this rule initially upon designation, annually, and at other times as requested by the director.