

401 KAR 50:047. Test procedures for capture efficiency.

RELATES TO: KRS 224.20-100, 224.20-110, 224.20-120, 42 U.S.C. 7401 et seq., 7408, 7410

STATUTORY AUTHORITY: KRS 224.10-100

CERTIFICATION STATEMENT:

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 requires the Environmental and Public Protection Cabinet to prescribe administrative regulations for the prevention, abatement, and control of air pollution. 42 USC 7410 likewise requires the state to implement standards for national primary and secondary ambient air quality. This administrative regulation provides capture efficiency test procedures for volatile organic compounds.

Section 1. Definitions. As used in this administrative regulation, all terms not defined in this section shall have the meaning given them in 401 KAR 50:010.

- (1) "Capture" means the containment or recovery of emissions from a process for direction into a duct which may be exhausted through a stack or sent to a control device.
- (2) "Capture system" means all equipment (including, but not limited to, hoods, ducts, fans, booths, ovens, dryers, etc.) that contains, collects, and transports an air pollutant to a control device.
- (3) "Capture efficiency" means the weight per unit time of volatile organic compounds (VOCs) entering a capture system and delivered to a control device divided by the weight per unit time of total VOCs generated by a source of VOCs, expressed as a percentage.
- (4) "Capture efficiency protocol" means a method for determining capture efficiency.
- (5) "Control device" means equipment such as an incinerator or carbon adsorber used to reduce, by destruction or removal, the amount of air pollutants in an air stream prior to discharge to the ambient air.
- (6) "Control system" means a combination of one (1) or more capture systems and control devices working in concert to reduce discharges of pollutants to the ambient air.
- (7) "Hood" means a partial enclosure or canopy for capturing and exhausting, by means of a draft, the organic vapors or other fumes rising from a coating process or other source.

Section 2. Applicability. This administrative regulation shall apply to all regulated VOC emitting processes employing a control system which are located in an ozone nonattainment area except marginal.

Section 3. Testing Protocols.

- (1) If a determination of capture efficiency is required in order to comply with an administrative regulation in 401 KAR Chapters 50 through 63, the owner or operator of an affected facility shall submit a proposed capture efficiency protocol to the cabinet.
- (2) The cabinet shall approve the use of a proposed capture efficiency protocol if it determines that the proposed capture efficiency protocol accurately describes the capture efficiency that will be achieved at the affected facility.
- (3) The cabinet shall not approve a proposed capture efficiency protocol that violates a protocol mandated by the U.S. EPA.

(401 KAR 050:047. 18 Ky.R. 2734; 3333; eff. 6-24-1992; TAm eff. 8-9-2007; Crt eff. 11-21-2018; Crt eff. 11-6-2025.)