§ 61.62  Emission standard for ethylene dichloride plants.

(a) Ethylene dichloride purification. The concentration of vinyl chloride in

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basis to those persons responsible for carrying out the procedure.

(n) Run means the net period of time during which an emission sample is collected.

(o) Ethylene dichloride purification includes any part of the process of ethylene dichloride purification following ethylene dichloride formation, but excludes crude, intermediate, and final ethylene dichloride storage tanks.

(p) Vinyl chloride purification includes any part of the process of vinyl chloride production which follows vinyl chloride formation.

(q) Reactor includes any vessel in which vinyl chloride is partially or totally polymerized into polyvinyl chloride.

(r) Reactor opening loss means the emissions of vinyl chloride occurring when a reactor is vented to the atmosphere for any purpose other than an emergency relief discharge as defined in §61.65(a).

(s) Stripper includes any vessel in which residual vinyl chloride is removed from polyvinyl chloride resin, except bulk resin, in the slurry form by the use of heat and/or vacuum. In the case of bulk resin, stripper includes any vessel which is used to remove residual vinyl chloride from polyvinyl chloride resin immediately following the polymerization step in the plant process flow.

(t) Standard temperature means a temperature of 20 °C (69 °F).

(u) Standard pressure means a pressure of 760 mm of Hg (29.92 in. of Hg).

(v) Relief valve means each pressure relief device including pressure relief valves, rupture disks and other pressure relief systems used to protect process components from overpressure conditions. “Relief valve” does not include polymerization shortstop systems, refrigerated water systems or control valves or other devices used to control flow to an incinerator or other air pollution control device.

(w) Leak means any of several events that indicate interruption of confinement of vinyl chloride within process equipment. Leaks include events regulated under subpart V of this part such as:

1. An instrument reading of 10,000 ppm or greater measured according to Method 21 (see appendix A of 40 CFR part 60);
2. A sensor detection of failure of a seal system, failure of a barrier fluid system or both;
3. Detectable emissions as indicated by an instrument reading of greater than 500 ppm above background for equipment designated for no detectable emissions measured according to Method 21 (see appendix A of 40 CFR part 60); and
4. In the case of pump seals regulated under §61.242(b), indications of liquid dripping constituting a leak under §61.242(b).

Leaks also include events regulated under §61.65(b)(8)(i) for detection of ambient concentrations in excess of background concentrations. A relief valve discharge is not a leak.

(x) Exhaust gas means any offgas (the constituents of which may consist of any fluids, either as a liquid and/or gas) discharged directly or ultimately to the atmosphere that was initially contained in or was in direct contact with the equipment for which gas limits are prescribed in §§61.62(a) and (b); 61.63(a); 61.64(a)(1), (b), (c), and (d); 61.65(b)(1)(ii), (b)(2), (b)(3), (b)(5), (b)(6)(ii), (b)(7), and (b)(9)(ii); and 61.65(d). A leak as defined in paragraph (w) of this section is not an exhaust gas. Equipment which contains exhaust gas is subject to §61.65(b)(8), whether or not that equipment contains 10 percent by volume vinyl chloride.

(y) Relief valve discharge means any nonleak discharge through a relief valve.

(z) 3-hour period means any three consecutive 1-hour periods (each commencing on the hour), provided that the number of 3-hour periods during which the vinyl chloride concentration exceeds 10 ppm does not exceed the number of 1-hour periods during which the vinyl chloride concentration exceeds 10 ppm.

§ 61.62  Emission standard for ethylene dichloride plants.
§ 61.63 Emission standard for vinyl chloride plants.

An owner or operator of a vinyl chloride plant shall comply with the requirements of this section and § 61.65.

(a) Vinyl chloride formation and purification: The concentration of vinyl chloride in each exhaust gas stream from any equipment used in vinyl chloride formation and/or purification is not to exceed 10 ppm (average for 3-hour period), except as provided in § 61.65(a). This requirement does not preclude combining of exhaust gas streams provided the combined stream is ducted through a control system from which the concentration of vinyl chloride in the exhaust gases does not exceed 10 ppm, or equivalent as provided in § 61.66. This requirement does not apply to equipment that has been opened, is out of operation, and met the requirement in § 61.65(b)(6)(i) before being opened.

(b) Oxychlorination reactor. Except as provided in § 61.65(a), emissions of vinyl chloride to the atmosphere from each oxychlorination reactor are not to exceed 0.2 g/kg (0.4 lb/vinyl chloride/ton) of 100 percent ethylene dichloride product, except as provided in paragraph (f)(1) of this section, with the product determined on a dry solids basis. This requirement does not apply to prepolymerization reactors in the bulk process. This requirement does apply to postpolymerization reactors in the bulk process, where the product means the gross product of prepolymerization and postpolymerization.

(c) Manual vent valve discharge. Except for an emergency manual vent valve discharge, there is to be no discharge to the atmosphere from any manual vent valve on a polyvinyl chloride reactor in vinyl chloride service. An emergency manual vent valve discharge means a discharge to the atmosphere which could not have been avoided by taking measures to prevent the discharge. Within 10 days of any discharge to the atmosphere from any manual vent valve, the owner or operator of the source from which the discharge occurs shall submit to the Administrator a report in writing containing information on the source, nature and cause of the discharge, the date and time of the discharge, the approximate total vinyl chloride loss during the discharge, the method used for determining the vinyl chloride loss (the calculation of the vinyl chloride loss), the action that was taken to prevent the discharge, and measures adopted to prevent future discharges.

(b) Stripper. The concentration of vinyl chloride in each exhaust gas stream from each stripper is not to exceed 10 ppm (average for 3-hour period), except as provided in § 61.65(a). This requirement does not apply to equipment that has been opened, is out of operation, and met the requirement in § 61.65(b)(6)(i) before being opened.

§ 61.64 Emission standard for polyvinyl chloride plants.

An owner or operator of a polyvinyl chloride plant shall comply with the requirements of this section and § 61.65.

(a) Reactor. The following requirements apply to reactors:

(1) The concentration of vinyl chloride in each exhaust gas stream from each reactor is not to exceed 10 ppm (average for 3-hour period), except as provided in paragraph (a)(2) of this section and § 61.65(a).

(2) The reactor opening loss from each reactor is not to exceed 0.02 g vinyl chloride/kg (0.04 lb vinyl chloride/ton) of polyvinyl chloride product, except as provided in paragraph (f)(1) of this section, with the product determined on a dry solids basis. This requirement does not apply to prepolymerization reactors in the bulk process. This requirement does apply to postpolymerization reactors in the bulk process, where the product means the gross product of prepolymerization and postpolymerization.

(c) Mixing, weighing, and holding containers. The concentration of vinyl