

DRAFT

I. Definitions

Add to 61.61

Homopolymer means a resin which consists of 97% or greater bound vinyl chloride.

Copolymer means a resin which consists of less than 97% bound vinyl chloride.

New Resin means a resin manufactured by a process not listed in 61.61 (e). Modifications in Chemical composition or processing conditions of existing products, or changes made to comply with the standard promulgated October 21, 1976, are specifically exempted from this definition.

New Source, for the purpose of this Subpart, means a source which is either a totally new facility, or an existing facility whose process and equipment has been modified substantially so as to result in a substantial increase in emissions. Modifications made to comply with the standard promulgated October 21, 1976, are excluded from this definition.

the construction of which began after the date of promulgation of these amendments.

1. Operating permit - 5 years
2. 50% or more capacity
3. Lower PLE
- 4

Proposed amendments

June 2 Version

Suggested changes

§ 61.03 Approval by the Administrator.

(b) If the Administrator determines that a stationary source for which an application pursuant to § 61.07 was submitted will not, if properly operated, cause emissions in violation of the standard or violation of § 61.73, he will approve the construction or modification of such source.

Delete

For existing sources

§ 61.62 Emission standard for ethylene dichloride plants.

An owner or operator of an ethylene dichloride plant shall comply with the requirements of this section and § 61.65.

(a) Ethylene dichloride purification: Except as provided in § 61.65(a), the concentration of vinyl chloride in all exhaust gases discharged to the atmosphere from any equipment used in ethylene dichloride purification is not to exceed the appropriate emission limit as follows:

(1) Each source for which construction had commenced on or before (date of ~~promulgation~~ of these amendments), 10 ppm until (date ~~three~~ years after promulgation of these amendments) and 5 ppm after (date ~~five~~ years after the promulgation of these amendments).

(2) Each source for which construction commenced after ~~June 2, 1977~~, 5 ppm.

(b) Oxychlorination reactor: Except as provided in § 61.65(a), emissions of vinyl chloride to the atmosphere are not to exceed the appropriate emission limit as follows:

(1) Each source for which construction had commenced on or before (date of ~~promulgation~~ of these amendments), 0.2 g/kg (0.0002 lb/lb of the 100 percent ethylene dichloride product from the oxychlorination reactor).

(2) Each source for which construction commenced after ~~June 2, 1977~~, 5 ppm.

(c) The requirements of this section do 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.

promulgated

five

five

unless further extended by the administrator.)

the promulgation of these amendments

promulgation

0.1 g/kg / kg

the date of the promulgation of these amendments

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§ 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: Except as provided in § 61.65(a), the concentration of vinyl chloride in all exhaust gases discharged to the atmosphere from any equipment used in vinyl chloride formation and/or purification is not to exceed the appropriate emission limit as follows:

existing (1) Each source, for which construction had commenced on or before ~~June 2, 1977~~, 10 ppm until (date ~~three years after~~ promulgation of these amendments) and 5 ppm after (date ~~three years after~~ promulgation of these amendments).

new (2) Each source for which construction commenced after ~~June 2, 1977~~, 5 ppm.

(b) The requirements of this section do 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.

the date of the promulgation of these amendments
five

five

unless otherwise extended by the administration.

the date of the promulgation of these amendments

§ 61.61 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) Except as provided in paragraph (a)(2) of this section and § 61.65(a), the concentration of vinyl chloride in all exhaust gases discharged to the atmosphere from each reactor is not to exceed the appropriate emission limit as follows:

(i) Each source for which construction had commenced on or before June 2, 1977 10 ppm until (date ~~three~~ years after promulgation of these amendments) and 5 ppm after (date ~~three~~ years after promulgation of these amendments);

(ii) Each source for which construction commenced after June 2, 1977, 5 ppm.

(b) Stripper: Except as provided in § 61.65(a), the concentration of vinyl chloride in all exhaust gases discharged to the atmosphere from each stripper is not to exceed the appropriate emission limit as follows:

(1) Each source for which construction had commenced on or before June 2, 1977 10 ppm until (date ~~three~~ years after promulgation of these amendments) and 5 ppm after (date ~~three~~ years after final promulgation of these amendments);

(2) Each source for which construction commenced after June 2, 1977, 5 ppm.

(c) Mixing, weighting, and holding containers: Except as provided in § 61.65(a), the concentration of vinyl chloride in all exhaust gases discharged to the atmosphere from each mixing, weighting, or holding container in vinyl chloride service which precedes the stripper (or the reactor if the plant has no stripper) in the plant process flow is not to exceed the appropriate emission limit as follows:

(1) Each source, for which construction had commenced on or before (date

of ~~proposal~~ of these amendments), 10 ppm until (date ~~three~~ years after promulgation of these amendments) and 5 ppm after (date ~~three~~ years after promulgation of these amendments);

(2) Each source for which construction commenced after June 2, 1977, 5 ppm.

(d) Monomer recovery system. Except as provided in § 61.65(a), the concentration of vinyl chloride in all exhaust gases discharged to the atmosphere from each monomer recovery system is not to exceed the appropriate concentration as follows:

(1) Each source for which construction had commenced on or before (date of ~~proposal~~ of these amendments), 10 ppm until (date ~~three~~ years after promulgation of these amendments) and 5 ppm after (date ~~three~~ years after promulgation of these amendments);

(2) Each source for which construction commenced after June 2, 1977, 5 ppm.

the date of the promulgation of these amendments

five

five

unless otherwise extended by the Administrator.

the date of the promulgation of these amendments

(b)(c) and (d), same changes as in (a)

(e) Sources following the stripper(s):
The following requirements apply to emissions of vinyl chloride to the atmosphere from the combination of all sources following the stripper(s) for the reactor(s) if the plant has no stripper in the plant process flow including, but not limited, to centrifuges, concentrators, blend tanks, filters, dryers, conveyor air discharges, baggers, storage containers, and inprocess wastewater.

(1) In polyvinyl chloride plants using stripping technology to control vinyl chloride emissions:

(i) For a ~~grade or grades~~ of polyvinyl chloride resin which have been produced by the plant on or before June 2, 1977, the weighted average residual vinyl chloride concentration in all the grades processed through the stripping operation on each calendar day, measured immediately after the stripping operation is completed, may not exceed the appropriate emission limit as follows:

(A) 2,000 ppm for polyvinyl chloride dispersion resins, excluding latex resins;

(B) 400 ppm for all other polyvinyl chloride resins, including latex resins, averaged separately for each type of resin;

(ii) For a grade or grades of polyvinyl chloride resin which have not been produced by the plant on or before June 2, 1977, the weighted average residual vinyl chloride concentration in all the grades processed through the stripping operation on each calendar day, measured immediately after the stripping operation is completed, may not exceed the appropriate emission limit as follows:

(A) 500 ppm for polyvinyl chloride dispersion resins, excluding latex resins;

(B) 100 ppm for all other polyvinyl chloride resins, including latex resins, averaged separately for each type of resin; or

types

the date of promulgation of these amendments

B. 400 ppm for bulk resins

C. 100 ppm for solution and latex resins

D. 100 ppm for easy processing and general purpose medium and high molecular weight homopolymers, and 2000 ppm for all other homopolymers and copolymers produced by ~~supervision. SUSPENSION PROCESS~~ ¹⁹ ₁₀ _{2.9} ₂ _{ASTM}

type

the date of promulgation of these amendments.

a figure to be determined by the Administrator after review of the production data taken during the first six months of commercial production. During the first six months, the limits of 61.64 (e) (1) (i) shall apply.

(2) In polyvinyl chloride plants controlling vinyl chloride emissions with technology other than stripping or in addition to stripping:

(i) For sources being used to process a ~~grade or grades~~ of polyvinyl chloride resin all of which had been produced by the plant on or before June 2, 1977:

(A) 2 g/kg (0.002 lb/lb) product from the stripper(s) (or reactor(s) if the plant has no stripper(s)) for dispersion polyvinyl chloride resins, excluding latex resins, with the product determined on a dry solids basis;

(B) 0.4 g/kg (0.004 lb/lb) product from the stripper(s) (or reactor(s) if the plant has no stripper(s)) for all other polyvinyl chloride resins, including latex resins, with the product determined on a dry solids basis.

(ii) For sources being used to process any grade of polyvinyl chloride resin not produced by the plant on or before June 2, 1977:

(A) 0.5 g/kg (0.0005 lb/lb) product from the stripper(s) (or reactor(s) if the plant has no stripper(s)) for dispersion polyvinyl chloride resins, excluding latex resins, with the product determined on a dry solids basis;

(B) 0.1 g/kg. (0.0001 lb/lb) product from the strippers (or reactor(s) if the plant has no stripper(s)) for all other polyvinyl chloride resins, including latex resins, with the product determined on a dry solids basis.

(f) The requirements of paragraphs (b), (c), and (d) of this section do 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.

change to conform to 61.64 (e) (1)

5. Section 61.65 is amended as follows:

A. By replacing the phrase "10 ppm" with the phrase "the appropriate emission limit specified in § 61.65(c)" in paragraphs (b) (1) (II), (b) (2), (b) (3) (I), (b) (3) (II), (b) (3) (III), (b) (3) (iv), (b) (3) (v), (b) (5), (b) (6) (II), and (b) (8) (II):

B. By revising paragraph (c) and adding paragraph (d) as set forth below.

§ 61.65 Emission standard for ethylene dichloride, vinyl chloride, and polyvinyl chloride plants.

(c) The emission limit which is not to be exceeded is as follows: (1) Each source, for which construction had commenced on or before June 2, 1977, 10 ppm until (date three years after promulgation of these amendments) and 5 ppm after (date three years after promulgation of these amendments).

(2) Each source for which construction commenced after June 2, 1977, 5 ppm.

(d) The requirements in paragraphs (b) (1), (b) (2), (b) (5), (b) (6), (b) (7) and (b) (8) of this section are to be incorporated into a standard operating procedure, and made available upon request for inspection by the Administrator. The standard operating procedure is to include provisions for measuring the vinyl chloride in equipment ≥ 4.75 m³ (1250 gal) in volume for which an emission limit is prescribed in § 61.65 (b) (6) (i) prior to opening the equipment and using Test Method 106, a portable hydrocarbon detector, or an equivalent or alternative method. The method

of measurement is to meet the requirements in § 61.67(g) (5) (i) (A) or (g) (5) (i) (B).

the date of promulgation of these amendments
five

five

unless otherwise extended by the Administrator

ok

Section 61.66

no change

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§ 61.67 Emission tests.

(a) Unless a waiver of emission testing is obtained under § 61.13, the owner or operator of a source to which this subpart applies shall test emissions from the source as follows:

(1) For an existing source or a new source which has an initial startup date preceding October 21, 1976:

(i) Within 90 days following October 21, 1976, and

(ii) For those sources subject to §§ 61.62(a); 61.63(a); 61.64 (a) (1), (b), (c), and (d); and/or 61.65(b) (1), (b) (2), (b) (3), (b) (5), (b) (6), and/or (b) (9), within 90 days following (date ~~three~~ years after the promulgation date of these amendments).

(2) For a new source for which initial startup occurs after October 21, 1976, within 90 days of startup.

five

unless otherwise extended by the Administrator.

Original Version

§ 61.63 Emission monitoring.

(a) A vinyl chloride monitoring system is to be used to monitor on a continuous basis the emissions from the sources for which emission limits are prescribed in § 61.62(a) and (b), § 61.63(a), and § 61.64(a) (1), (b), (c), and (d), and for any control system to which reactor emissions are required to be ducted in § 61.65(b) (1) (II), and (b) (2), (b) (5), (b) (6) (II), and (b) (9) (II).

(b) The vinyl chloride monitoring system(s) used to meet the requirement in paragraph (a) of this section is to be a device which obtains air samples from one or more points on a continuous sequential basis and analyzes the samples with gas chromatography or, if the owner or operator assumes that all hydrocarbons measured are vinyl chloride, with infrared spectrophotometry, flame ion detection, or an equivalent or alternative method. The vinyl chloride monitoring system used to meet the requirements in § 61.65(b) (3) (i) may be used to meet the requirements of this section.

(c) A daily ~~span~~ check is to be conducted for each vinyl chloride monitoring system used. For all of the emission sources listed in paragraph (a) of this section, except the one for which an emission limit is prescribed in § 61.62(b), the ~~span~~ check is to be conducted with a concentration of vinyl chloride ~~of 10 ppm~~. For the emission sources for which an emission limit is prescribed in § 61.62(b), the daily span check is to be conducted with a concentration of vinyl chloride which is determined to be ~~equivalent to the emission limit for that source based on the emission rate required by that limit~~. The calibration is to be done with either:

(1) A calibration gas mixture prepared from the gases specified in sections 5.2.1 and 5.2.3 of Test Method 106, or

(2) A calibration gas cylinder containing the appropriate concentration of vinyl chloride. If a calibration cylinder is used, the analysis must be traceable to the National Bureau of Standards or to a gravimetrically calibrated vinyl chloride permeation tube.

← correct omission here

← continuing

← operational

← { A monthly span check is to be performed on instruments which have a reference gas permanently corrected to one point, and a weekly check on those that do not.

← of approximately.

← Use June 7, 1977 language here.

Section 61.70

Add to (c) (2) (i)

These samples are to be composited into a sample representative of the production for each eight-hour shift before analysis.

of each grade as long as it is necessary to keep records of each grade and report about operating parameters and maintenance

Section 61.71

No change

Operating Permits
Section 61.72. Interim Limits

Delete and replace with:

(a) Upon satisfactory completion of the emission tests required in 61.67, the Administrator shall issue an operating permit for five years from the date of acceptance of the tests.

(b) At least six months before the expiration of this permit, the operator shall apply for a reissuance of the permit, stating the performance he expects to achieve during the next five year period. *consistent with limits*
~~The Administrator shall review the performance data required to be submitted under this subpart, and shall reissue a five-year extension based upon the available facts and the requirements of this standard.~~

~~(c) Provide wording for adjudicatory hearings, etc., to establish new limits and/or compliance programs.~~

61.73. offset

Delete