

Virginia Occupational Safety & Health



<u>VOSH PROGRAM DIRECTIVE</u>: 12-242B <u>ISSUED</u>: 15 February 2018

Subject Gases, Vapors, Fumes, Dusts, and Mists, 1926.55; Amendments

<u>Purpose</u> CHANGE III transmits amendments to Gases, Vapors, Fumes, Dusts, and Mists, which resulted

from the adoption of the Final Rule for the Occupational Exposure to Beryllium (82 FR 2470, 09 January 2017). **CHANGE II** transmits amendments which resulted from the adoption of the Final Rule for the Occupational Exposure to Respirable Crystalline Silica (81 FR 16285, 25 March 2016). **CHANGE I** transmits to field personnel two amendments to the above-referenced standard. The first amendment resulted from the final regulation concerning the Occupational Exposure to 1,3-Butadiene, § 1910.1051 (61 FR 56746, 4 November 1997). The second amendment resulted from the final regulation concerning the Occupational Exposure

to Methylene Chloride, § 1910.1052 (62 FR 1494, 10 January 1997).

This Program Directive is an internal guideline, not a statutory or regulatory rule, and is intended to provide instructions to VOSH personnel regarding internal operation of the Virginia Occupational Safety and Health Program and is solely for the benefit of the program. This document is not subject to the Virginia Register Act or the Administrative Process Act; it does not have general application and is not being enforced as having the force of law.

Scope This Directive applies VOSH-wide.

Reference CHANGE III: 82 FR 2470 (09 January 2017);

CHANGE II: 81 FR 16285 (25 March 2016); and

CHANGE I: 61 FR 56746 (4 November 1997) and 62 FR 1494 (10 January 1997)

<u>Cancellation</u> VOSH PD 12-242A (12/01/16)

Effective Date 15 February 2018

Expiration Date Not Applicable

Action Directors and Managers shall ensure that field personnel understand the standard in this

Directive.

<u>C. Ray Davenport</u> Commissioner

Distribution: Commissioner of Labor and Industry

Assistant Commissioner
VOSH Directors and Managers
VOSH Legal Support & OIS Staffs

Cooperative Programs Manager

VOSH Compliance & Cooperative Programs Staffs
OSHA Region III & OSHA Norfolk Area Offices

I. <u>Background</u>

CHANGE III: On January 9, 2017, federal OSHA published its new Final Rule on the Occupational Exposure to Beryllium (82 FR 2470) which also impacted §1926.55.

On February 16, 2017, the Safety and Health Codes Board adopted amendments to Gases, Vapors, Fumes, Dusts, and Mists, §1926.55, which became effective date on May 15, 2017.

CHANGE II: On March 26, 2016, federal OSHA published its new Final Rule on the Occupational Exposure to Respirable Crystalline Silica (81 FR 16285) which also impacted §1926.55.

On September 13, 2016, the Safety and Health Codes Board adopted amendments to Gases, Vapors, Fumes, Dusts, and Mists, §1926.55, which became effective on December 1, 2016.

CHANGE I: The basis for the first amendment to Appendix A of Gases, Vapors, Fumes, Dusts, and Mists, §1926.55, was the promulgation of federal OSHA's new final rule for the Occupational Exposure to 1,3-Butadiene (BD), General Industry, § 1910.1051, which was published on November 4, 1996. This standard reduced the permissible exposure limit (PEL) from concentrations up to 1,000 parts 1,3-Butadiene per million parts of air (1,000) as an eight-hour time-weighted average (TWA) to an 8-hour TWA of 1 ppm and a short term exposure limit (STEL) of 5 ppm for 15 minutes.

The second amendment to Appendix A of § 1926.55 was a result of the promulgation of federal OSHA's final rule for the Occupational Exposure to Methylene Chloride (MC), § 1910.1052, which was published on January 10, 1997. This final rule reduced the existing eight-hour TWA PEL from 500 parts MC per million parts (ppm) and reduced the existing short-term exposure limit from 2,000 ppm (measured over 5 minutes in any 2 hour period) to 125 ppm, measured as a 15-minute TWA.

On April 7, 1997, the Safety and Health Codes Board adopted amendments to Gases, Vapors, Fumes, Dusts, and Mists, §1926.55, with an effective date of July 15, 1997.

II. Summary

CHANGE III: Federal OSHA published its Final Rule for the Occupational Exposure to Beryllium (82 FR 2470, January 9, 2017). In addition to promulgating the new standard, OSHA amended §1926.55, Appendix A, "1970 American Conference of Governmental Industrial Hygienists' Threshold Limit Values of Airborne Contaminants" by revising the entry for "Beryllium and beryllium compounds (as Be). Footnote q was added to make clear that preceding PELs for beryllium apply to any sectors or operations where the new TWA PEL of $0.2 \, \mu \text{g/m}^3$ and STEL of $2.0 \, \mu \text{g/m}^3$ are not in effect. The preceding PELs, retained in Appendix A of 1926.55, are also applicable during the time between publication of the beryllium rule and the dates established for compliance with the rule, as well as in the event of regulatory delay, a stay, or partial or full invalidation by the Court.

To access these amendments which appear in the Final Rule for the Occupational Exposure to Beryllium; and Other Related Standards, please click on the link below:

https://www.osha.gov/sites/default/files/laws-regs/federalregister/2017-01-09.pdf

CHANGE II: Federal OSHA published its Final Rule for Occupational Exposure to Respirable Crystalline Silica (81 FR 16285, March 25, 2016). In addition to promulgating the new standard, OSHA amended §1926.55, Appendix A, "1970 American Conference of Governmental Industrial Hygienists' Threshold Limit Values of Airborne Contaminants," by revising the entries for crystalline silica to cross-reference §1926.1153. Footnotes were added to make clear that preceding PELs apply to any sectors or operations where the new PEL of $50~\mu\text{g/m}^3$ is not in effect. These preceding PELs are also applicable during the time between publication of the silica rule and the dates established for compliance with the rule, as well as in the event of regulatory delay, a stay, or partial or full invalidation by the Court.

To access these amendments which appear in the Final Rule for the Occupational Exposure to Respirable Crystalline Silica, Parts 1910, 1915, and 1926; Final Rule; and Other Related Standards, please click on the link below:

https://www.gpo.gov/fdsys/pkg/FR-2016-03-25/pdf/2016-04800.pdf

CHANGE I: In the first amendment, Appendix A of § 1926.55 was revised to reflect changes resulting from the final rule for the Occupational Exposure to 1,3-Butadiene (BD), § 1910.1051. Changes to Appendix A of §1926.55 included the following: the entry in Appendix A to §1926.55 for "Butadiene (1,3-Butadiene)" was amended to remove the "1000" and "2200" from the columns entitled ppma and mg/m³ b respectively; added "1 ppm/5ppm STEL" in the ppm³ column; and added the following to the butadiene entry: ": See 29 CFR 1910.1051; 29 CFR 1910.19(I)" so that the entry reads as follows: "Butadiene (1,3-Butadiene); See 29 CFR 1910.1051; 29 CFR 1910.19(1)."

In the second amendment, the entire entry for Methylene Chloride was removed and replaced with the following entry in the substance column: "Methylene chloride: see § 1910.1052."



GASES, VAPORS, FUMES, DUSTS, AND MISTS, § 1926.55; Amendments

As Adopted by the

Safety and Health Codes Board

Date: February 16, 2017



VIRGINIA OCCUPATIONAL SAFETY AND HEALTH PROGRAM

VIRGINIA DEPARTENT OF LABOR AND INDUSTRY

Effective Date: 15 May 2017

16VAC25-175-1926.55, Gases, Vapors, Fumes, Dusts, and Mists, § 1926.55

When the regulations, as set forth in the Amendment to the standard for Gases, Vapors, Fumes, Dusts, and Mists, § 1926.55, are applied to the Commissioner of the Department of Labor and Industry and/or to Virginia employers, the following federal terms shall be considered to read as below:

<u>Federal Terms</u> <u>VOSH Equivalent</u>

29 CFR VOSH Standard

Assistant Secretary Commissioner of Labor and Industry

Agency Department

March 10, 2017 May 15, 2017

PART 1926—SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION

Subpart D—Occupational Health and Environmental Controls

■ 8. In § 1926.55, amend appendix A by revising the entry for "Beryllium and beryllium compounds (as Be)" and adding footnote q.

The revisions read as follows:

§ 1926.55 Gases, vapors, fumes, dusts, and mists.

Appendix A to § 1926.55—1970 American Conference of Governmental Industrial Hygienists' Threshold Limit Values of Airborne Contaminants

THRESHOLD LIMIT VALUES OF AIRBORNE CONTAMINANTS FOR CONSTRUCTION

	Substano	9	CAS No.d	ppm**	mg/m 30	Skin designation
Beryllium and berylli	ium compounds (as E	le); see 1926.1124 ^(q)	 7440-41-7	***************************************	0.002	

THRESHOLD LIMIT VALUES OF AIRBO	RNE CONTAMINANTS FOR	CONSTRUCTIO	N—Continue	d
Substance	CAS No.4	noma*	ma/m 35	Skin designation

	Substance	CAS No.d	ppm **	mg/m ≫	Skin designation
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^a Parts of vapor or gas per million parts of contaminated air by volume at 25 °C and 760 torr.

^b Milligrams of substance per cubic meter of air. When entry is in this column only, the value is exact; when listed with a ppm entry, it is approximate.

^d The CAS number is for information only. Enforcement is based on the substance name. For an entry covering more than one metal compound, measured as the metal, the CAS number for the metal is given—not CAS numbers for the individual compounds.

⁹ This standard applies to any operations or sectors for which the beryllium standard, 1926.1124, is stayed or otherwise is not in effect.

GASES, VAPORS, FUMES, DUSTS, AND MISTS, § 1926.55; Amendments

As Adopted by the

Safety and Health Codes Board

Date: September 13, 2016



VIRGINIA OCCUPATIONAL SAFETY AND HEALTH PROGRAM

VIRGINIA DEPARTENT OF LABOR AND INDUSTRY

Effective Date: <u>01 December 2016</u>

16VAC25-175-1926.55, Gases, Vapors, Fumes, Dusts, and Mists, § 1926.55

When the regulations, as set forth in the Amendment to the standard for Gases, Vapors, Fumes, Dusts, and Mists, § 1926.55, are applied to the Commissioner of the Department of Labor and Industry and/or to Virginia employers, the following federal terms shall be considered to read as below:

<u>Federal Terms</u> <u>VOSH Equivalent</u>

29 CFR VOSH Standard

Assistant Secretary Commissioner of Labor and Industry

Agency Department

<u>Federal Effective Dates</u>
<u>VOSH Effective Dates</u>

June 23, 2016 December 1, 2016

PART 1926—SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION

Subpart D—Occupational Health and Environmental Controls "Silica, crystalline quartz, respirable dust", "Silica, crystalline tripoli (as quartz), respirable dust", and "Silica, crystalline tridymite, respirable dust";

- b. Under the "MINERAL DUSTS" heading of the table, by revising the entry for "Silica: Cystalline Quartz" in column 1;
- c. Adding footnote 5; and
- d. Adding footnote p .

The revisions and additions read as follows:

 \S 1926.55 Gases, vapors, fumes, dusts, and mists.

* * * * *

Appendix A to § 1926.55—1970
endix A:
r "Silica,
rable dust",
Values of Airborne Contaminants

■ 9. In § 1926.55, amend appendix A: ■ a. By revising the entries for "Silica, crystalline cristobalite, respirable dust",

THRESHOLD LIMIT VALUES OF AIRBORNE CONTAMINANTS FOR CONSTRUCTION

Substance CAS No.d ppma* mg/m3 b* Skin designation

Silica, crystalline, respirable dust

Footnotes.

THRESHOLD LIMIT VALUES OF AIRBORNE CONTAMINANTS FOR CONSTRUCTION—Continued

Substance			CAS No.d	ppm a *	mg/m ^{3 b *}	Skin designation	
Cristobalite; see	1926.1153			14464-46-1			
	6.111535			14808-60-7			
Tripoli (as quartz); see 1926.11535			1317-95-9				
	Trydimite; see 1926.1153			15468-32-3			
*	*	*	*	,	•	*	*
			MINERAL DUS	STS			
SILICA:							
Crystalline							250 (k)
Quartz. Threshold Li	mit calculated from the	e formula (P)					% SiO ² +5
*	*	*	*	,	•	*	*

⁵ See Mineral Dusts table for the exposure limit for any operations or sectors where the exposure limit in § 1926.1153 is stayed or is otherwise not in effect.

a Parts of vapor or gas per million parts of contaminated air by volume at 25 °C and 760 torr.

b Milligrams of substance per cubic meter of air. When entry is in this column only, the value is exact; when listed with a ppm entry, it is ap-

^dThe CAS number is for information only. Enforcement is based on the substance name. For an entry covering more than one metal compound, measured as the metal, the CAS number for the metal is given—not CAS numbers for the individual compounds.

 $^{^{\}mathrm{p}}$ This standard applies to any operations or sectors for which the respirable crystalline silica standard, 1926.1153, is stayed or otherwise is not in effect.

GASES, VAPORS, FUMES, DUSTS, AND MISTS, § 1926.55; AMENDMENTS

As Adopted by the

Safety and Health Codes Board

Date: April 7, 1997



VIRGINIA OCCUPATIONAL SAFETY AND HEALTH PROGRAM

VIRGINIA DEPARTENT OF LABOR AND INDUSTRY

Effective Date: July 15, 1997

16 VAC 25-175-1926.55, Gases, Vapors, Fumes, Dusts, and Mists, § 1926.55

When the regulations, as set forth in the Amendments to Gases, Vapors, Fumes, Dusts, and Mists, § 1926.55, are applied to the Commissioner of the Department of Labor and Industry and/or to Virginia employers, the following federal terms shall be considered to read as below:

<u>Federal Terms</u> <u>VOSH Equivalent</u>

29 CFR VOSH Standard

Assistant Secretary Commissioner of Labor and Industry

Agency Department

<u>Federal Effective Dates</u>
<u>VOSH Effective Dates</u>

February 3, 1997 July 15, 1997

April 10, 1997 July 15, 1997