

CHAPTER 7. REGULATIONS AND GUIDELINES

Pertinent international and national regulations, advisories, and guidelines regarding chloroethane in air, water, and other media are summarized in Table 7-1. This table is not an exhaustive list, and current regulations should be verified by the appropriate regulatory agency.

ATSDR develops MRLs, which are substance-specific guidelines intended to serve as screening levels by ATSDR health assessors and other responders to identify contaminants and potential health effects that may be of concern at hazardous waste sites. See Section 1.3 and Appendix A for detailed information on the MRLs for chloroethane.

Table 7-1. Regulations and Guidelines Applicable to Chloroethane

Agency	Description	Information	Reference
Air			
EPA	RfC	10 mg/m ³ (4 ppm)	IRIS 1991
	Provisional peer reviewed toxicity values Provisional subchronic RfC	4 mg/m ³ (1.5 ppm)	EPA 2007
WHO	Air quality guidelines	Not listed	WHO 2010
Water & Food			
EPA	Drinking water standards and health advisories	Not listed	EPA 2018a
	National primary drinking water regulations	Not listed	EPA 2024
	RfD	Not evaluated	IRIS 1991
	Provisional peer reviewed toxicity values Provisional subchronic RfD	0.1 mg/kg/day	EPA 2007
WHO	Drinking water quality guidelines	Not listed	WHO 2022
FDA	Substances added to food (formerly EAFUS)	Not listed	FDA 2023
Cancer			
HHS	Carcinogenicity classification	Not evaluated	NTP 2021
EPA	Carcinogenicity classification	Not evaluated	IRIS 1991
	Provisional peer reviewed toxicity values Provisional carcinogenicity assessment	Likely to be carcinogenic to humans	EPA 2007
IARC	Carcinogenicity classification	Group 3 ^a	IARC 1999
Occupational			
OSHA	PEL (8-hour TWA) for general industry, shipyards, and construction	1,000 ppm	OSHA 2023a , 2023b , 2023c

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Agency	Description	Information	Reference
NIOSH	REL (up to 10-hour TWA)	Handle with caution in the workplace ^b	NIOSH 2018 , 2019
	IDLH	3,800 ppm ^c	NIOSH 1994
Emergency Criteria			
EPA	AEGLs-air	No data	EPA 2018b
DOE	PACs-air		DOE 2024a
	PAC-1 ^d	300 ppm	
	PAC-2 ^d	5,100 ppm ^e	
	PAC-3 ^d	20,000 ppm ^f	

^aGroup 3: not classifiable as to carcinogenicity to humans.

^bDue to structural similarity to other chloroethanes shown to be carcinogenic in animals.

^c10% of the LEL for chloroethane.

^dDefinitions of PAC terminology are available from DOE (2024b).

^eBetween 10 and 50% of the LEL.

^fBetween 50 and 100% of the LEL.

AEGL = acute exposure guideline levels; DOE = Department of Energy; EAFUS = Everything Added to Food in the United States; EPA = Environmental Protection Agency; FDA = Food and Drug Administration; HHS = Department of Health and Human Services; IARC = International Agency for Research on Cancer; IDLH = immediately dangerous to life or health; IRIS = Integrated Risk Information System; LEL = lower explosive limit; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration; PAC = protective action criteria; PEL = permissible exposure limit; REL = recommended exposure limit; RfC = inhalation reference concentration; RfD = oral reference dose; TWA = time-weighted average; WHO = World Health Organization