CHAPTER 7. REGULATIONS AND GUIDELINES

Pertinent international and national regulations, advisories, and guidelines regarding 1,2,3-trichloropropane 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 1,2,3-trichloropropane.

Agency	Description	Information	Reference
	Air		
EPA	RfC	0.0003 mg/m ³ (0.00005 ppm)	IRIS 2009
WHO	Air quality guidelines	Not listed	WHO 2010
	Water & F	Food	
EPA	Drinking water standards and health advisories		<u>EPA 2018a</u>
	1-Day health advisory (10-kg child)	0.6 mg/L	
	10-Day health advisory (10-kg child)	0.6 mg/L	
	DWEL	0.1 mg/L	
	Lifetime health advisory	No data	
	10 ⁻⁴ Cancer risk	No data	
	National primary drinking water regulations	Not listed	EPA 2009b
	RfD	0.004 mg/kg/day	IRIS 2009
WHO	Drinking water quality guidelines	Not listed	<u>WHO 2017</u>
FDA	Substances Added to Food ^a	Not listed	FDA 2020
	Cance	r	
HHS	Carcinogenicity classification	Reasonably anticipated to be a human carcinogen	<u>NTP 2016</u>
EPA	Carcinogenicity classification	Likely to be carcinogenic to humans	IRIS 2009
IARC	Carcinogenicity classification	Group 2A ^b	IARC 1995
	Occupati	onal	
OSHA	PEL (8-hour TWA) for general industry	50 ppm (300 mg/m ³)	OSHA <u>2019a</u> ,
		/	<u>2019b, 2019c</u>
NIOSH	REL (up to 10-hour TWA)	10 ppm (60 mg/m³) ^{c,d}	<u>NIOSH 2019</u>
	IDLH	100 ppm ^c	NIOSH 1994

Table 7-1. Regulations and Guidelines Applicable to 1,2,3-Trichloropropane

Agency	Description	Information	Reference
		Emergency Criteria	
EPA	AEGLs-air	Not listed	EPA 2018b
DOE	PACs-air		DOE 2018a
	PAC-1 ^e	0.015 ppm	
	PAC-2 ^e	170 ppm	
	PAC-3 ^e	1,000 ppm	

Table 7-1. Regulations and Guidelines Applicable to 1,2,3-Trichloropropane

^aThe Substances Added to Food inventory replaces EAFUS and contains the following types of ingredients: food and color additives listed in FDA regulations, flavoring substances evaluated by FEMA or JECFA, GRAS substances listed in FDA regulations, substances approved for specific uses in food prior to September 6, 1958, substances that are listed in FDA regulations as prohibited in food, delisted color additives, and some substances "no longer FEMA GRAS."

^bGroup 2A: probably carcinogenic to humans.

^cPotential occupational carcinogen.

^dSkin designation indicates the potential for dermal absorption.

^eDefinitions of PAC terminology are available from U.S. Department of Energy (DOE 2018b).

AEGL = acute exposure guideline levels; DOE = Department of Energy; DWEL = drinking water equivalent level; EAFUS = Everything Added to Food in the United States; EPA = Environmental Protection Agency; FDA = Food and Drug Administration; FEMA = Flavor and Extract Manufacturers Association of the United States; GRAS = generally recognized as safe; HHS = Department of Health and Human Services; IARC = International Agency for Research on Cancer; IDLH = immediately dangerous to life or health concentration; IRIS = Integrated Risk Information System; JECFA = Joint FAO/WHO Expert Committee on Food Additives; 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