7. REGULATIONS AND ADVISORIES

1,2-Dibromoethane is on the list of chemicals appearing in "Toxic Chemicals Subject to Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986" (EPA 1987f).

The international, national, and state regulations and guidelines regarding 1,2-dibromoethane in air, water, and other media are summarized in Table 7-1.

7. REGULATIONS AND ADVISORIES

TABLE 7-1. Regulations and Guidelines Applicable to 1,2-Dibromoethane

Agency	Description	Information	References
INTERNATIONAL			
IARC	Carcinogenic classification	Group 2A[a]	IARC 1987
NATIONAL			
Regulations:			
a. Air:			
OSHA (Transitional Values)	PEL TWA (8 hr)	20 ppm	OSHA 1974 (29 CFR 1910.1000)
	Ceiling level (CL)	30 ppm	OSHA 1974 (29 CFR 1910.1000)
	Acceptable maximum peak above CL (5 min for 8 hr shift)	50 ppm	OSHA 1974 (29 CFR 1910.1000)
	STEL (15 min)	0.5 ppm	EPA 1987a
b. Water:			
EPA ODW	Monitoring for organic chemicals: Groundwater monitoring requirement for EDB if the state determines they are vulnerable to EDB contamination	Yes	EPA 1987d (40 CFR 141.40)
EPA OWRS	NPDES permit application requirements: Toxic pollutants and hazardous substances to be identified by existing discharges if expected to be present	Yes	EPA 1983 (40 CFR 122, Appendix D)
c. Other:			
DOT	Label	Poison	DOT 1980 (49 CFR 172.102)
EPA OERR	CERCLA reportable quantity	1000 lbs (454 kg)	EPA 1986 (40 CFR 117.3)
EPA OPP	Decision and emergency order suspending registrations of pesticide products containing 1,2-dibromoethane for use as a grain and spot milling fumigant		EPA 1984b
EPA OSW	Designation of hazardous substances	Yes	EPA 1978 (40 CFR 116.4)
	Listing as toxic waste from specific sources: Wastewater from the reactor vent gas scrubber in the production of EDB via bromination of ethene; spent adsorbent solids and still bottoms from purification of EDB in its production via bromination of ethene	Yes	EPA 1981b (40 CFR 261.32)
EPA OSW	Listing as toxic waste: Discarded commercial chemical products off-specifications species container residues, and spill residues thereof	Yes	EPA 1988a
	Listing as hazardous waste constituent	Yes	EPA 1988b (40 CFR 261, Appendix VIII)
	Groundwater monitoring list	Yes	EPA 1987e (40 CFR 264, Appendix IX)

TABLE 7-1 (Continued)

Agency	Description	Information	References
NATIONAL (Cont.)			
EPA OTS	Toxic chemical release reporting; Community right-to-know (proposed)	Yes	EPA 1987f
OSHA	Meets criteria for OSHA medical records rule	Yes	OSHA 1980 (29 CFR 1910.20)
RCRA	Handling and report/recordkeeping requirements--limit	1000 kg	CESARS 1989
USDA	Removal of provisions that mangoes be treated with EDB before entry into the United States	Yes	USDA 1988
Guidelines:			
a. Air:			
ACGIH	Carcinogenicity	A2[b]	ACGIH 1987-88
	Skin designation	Yes	ACGIH 1987-88
NIOSH	REL TWA (8-hr)	0.045 ppm	NIOSH 1985
	CL (15-min)	0.13 ppm (1.0 mg/m^3)	NIOSH 1985
	Designated as NIOSH occupational carcinogen	Yes	NIOSH 1985
b. Water:			
EPA ODW	Health Advisories:		IRIS 1991
	1-day	8.0 µg/L	
	10-day	8.0 µg/L	
c. Other:			
EPA	Carcinogen classification	B2[c]	IRIS 1991
	Unit risk (air)	2.2×10^{-4} µg/m^3	IRIS 1991
	Unit risk (water)	2.5×10^{-3} µg/L	IRIS 1991
	Oral cancer potency factor	85 mg/kg/day	IRIS 1991
STATE			
Regulations and Guidelines:			
a. Air:	Acceptable ambient air concentrations (µg/m^3)		NATICH 1988
Connecticut	8-hr	755	
Indiana	8-hr	720	
North Carolina	24-hr	1.90	
Pennsylvania (Philadelphia)	1-yr	2.47	
Virginia	24-hr	1500	
	Point source emissions limits for BACT		
North Dakota		No data	Rydell 1990
Wisconsin		250.0 lbs/yr	State of Wisconsin Department of Natural Resources 1988a

TABLE 7-1 (Continued)

Agency	Description	Information	References
STATE (Cont.)			
b. Water:	Drinking water quality standards and guidelines (μg/L)		FSTRAC 1988
Arizona		0.010	
California		0.02	
Connecticut		0.1	
Kansas		0.005	
Massachussetts		0.04	
Maine		1	
Minnesota		0.008	
New Mexico		0.1	
Washington		0.02	
Vermont		0.01	State of Vermont Agency of Natural Resources
Wisconsin		0.5	
	Public health groundwater quality standards (μg/L)		State of Wisconsin Department of Natural Resources 1988b
Wisconsin	Enforcement standard	0.010	
Wisconsin	Preventive action limit	0.001	

[a]Group 2A: Inadequate evidence of carcinogenicity in humans; sufficient evidence in animals
[b]A2: Suspected human carcinogen
[c]B2: Probable human carcinogen

ACGIH = American Conference of Governmental Industrial Hygienists; BACT = Best Available Control Technology; CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act; CL = Ceiling Level; DOT = Department of Transportation; EDB = 1,2-Dibromoethane; EPA = Environmental Protection Agency; NIOSH = National Institute for Occupational Safety and Health; NPDES = National Pollutant Discharge Elimination System; ODW = Office of Drinking Water; OERR = Office of Emergency and Remedial Response; OPP = Office of Pesticide Programs; OSHA = Occupational Safety and Health Administration; OSW = Office of Solid Wastes; OTS = Office of Toxic Substances; OWRS = Office of Water Regulations and Standards; PEL = Permissible Exposure Limit; RCRA = Resource Conservation Recovery Act; REL = Recommended Exposure Limit; TWA = Time-Weighted Average; USDA = United States Department of Agriculture.